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century is undergoing rapid changes owing to the exigencies of war. The loss of foreign markets and the difficulties of transport, both internal and to such other foreign countries as are still accessible, have rendered forward trading difficult. Even before the outbreak of the present war and especially since the World Depression of 1930-31 import restrictions, quotas, exchange regulations and bilateral and multilateral trade agreements had begun to change the course of the marketing system that was governed by *laissez faire*. The ideas of planned economy and crop restrictions, import restrictions, etc., had found favour even in Democratic countries. Forward trading was the best that the *laissez faire* system could produce and it was its last word to promote stability of prices thus facilitating marketing of agricultural produce. With *laissez faire* discredited, almost every economic activity was planned in the Totalitarian countries. As for the future, the marketing system will depend on the structure of society and if, as seems not improbable, even the Democratic countries adopt the principle of planned economy for reconstruction after the war is over, the marketing system that has prevailed up to now may be greatly modified. This, however, is a peep into the future.

In the meantime if efforts can be made in India to ascertain the cost of production of the main commodities, and the average net return to the cultivator for them over a series of years, it will be a great help to the vast mass of agriculturists concerned and a valuable source of guidance to the relative local Governments. I hope that the various Universities in India which train students for advanced research in Economics will make efforts to handle this question of contemporary, almost day to day, importance to our agricultural economy. Dr. Dholakia's enterprise in undertaking a study of this nature deserves high appreciation by all interested in the study of the economic structure of the country.

"Suneeta", Ridge Road,
Bombay, 6.
30th April 1942.

Purshotamdas Thakurdas.

Editor's Preface to First Edition

The growth of futures markets in various commodities is an important development in modern business methods. The cotton futures market is the most important of such markets in our country. Though a large number of persons are interested in the work of these markets, we have no authoritative source of information regarding their actual working; nor has there yet been any attempt at giving a detailed explanation of their economic significance. The part such markets play in the formation of prices, in the allocation and distribution of risk and in the evening out of seasonal and other fluctuations is of the highest theoretical and practical interest.

The present volume is the first systematic attempt to fill this gap. After giving a brief history of the futures trading in cotton the author proceeds to analyse the nature of a futures contract bringing out its full implications. The organisation of a futures market in cotton is discussed with particular reference to the East India Cotton Association. The main issues regarding the problem of the regulation of these markets have been explained and concrete suggestions are made to indicate the lines of reform. The author has also made useful comparisons with similar markets in other countries.

Though the information regarding cotton futures markets in other countries is available, the only way to obtain the data regarding the Indian market was to obtain familiarity with the actual working of the market by attending the ring and by being in contact with those actually engaged in the market. The difficulties of obtaining the necessary facilities for such a purpose on the part of an academic worker are obvious. I have referred in some of the former volumes in this series to the need for closer co-operation between businessmen and academic workers in the interests of research and spread of knowledge. I must record with grateful thanks the ungrudging help which we received from Mr. Pranjali Devkaran Nanjee who extended to the author the privileges of a member of his staff in order that he may obtain the necessary insight into the working of the market. The East India Cotton Association and the Karachi Cotton Association as well as several prominent members of the trade were good enough to help the author in obtaining information and in discussing difficult points.

We are grateful to Sir Purshotamdas Thakurdas for his kindness in writing a foreword to this volume; it was in the fitness of things that he should do so; the present status and organisation of the Bombay Cotton Market are his creation. When the thesis

was referred to Sir Purshotamdas by the University of Bombay he took a keen personal interest in it; the author and I had opportunities to discuss points arising out of the book with Sir Purshotamdas for several hours and his sympathetic criticism has gone a long way to improve the quality of the book. It may be added, however, that the author alone is responsible for the opinions expressed in the book.

School of Economics & Sociology,
University of Bombay,
30th April, 1942.

C. N. VAKIL.

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Editor's Preface to Second Edition

The demand for a second edition of this book shows that it has supplied a real want and has been found useful by those concerned. Since the first edition was published, several important developments have taken place. The author has taken the opportunity to thoroughly revise the book in the light of recent events. Particular reference must be made of the addition of two new chapters, one on 'the hedge contract system for Indian cotton' and the other on 'Universal standards for Indian cotton'. Similarly new sections on 'war time factors affecting cotton prices' and 'Bombay Forward Contracts Control Act, 1947' have been added to the chapters on 'Prices' and 'Regulation' respectively. It is hoped that the revised edition will be found useful for the study of the subject as well as a source of reference.

^a
ⁱ School of Economic & Sociology,
University of Bombay.
30th November 1949.

C. N. VAKIL.

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PART I

STRUCTURE OF FUTURES TRADING AND MARKETS.

CHAPTER I

INTRODUCTION

THERE are probably few subjects upon which more nonsense is talked or more ignorance is displayed than 'futures trading.' There are, perhaps, very few public and private institutions which, generally speaking, attract as much attention and occupy as much space in the public imagination as the cotton futures markets. It is a commonplace view in this connection that risk is universal. Speculation is inevitable. Speculative risk may be transferred by one group to another, but it cannot be obliterated. In fact, it is an all pervading factor in the marketing of an agricultural staple commodity from the field to the factory; from the producer to the consumer. The technical apparatus of marketing has become so intricate that scarcely anyone but an operator or a professional dealer has any opportunity of making himself familiar with it.

IMPORTANCE OF THE SUBJECT

Markets may be distinguished as farmers' local markets, central markets, spinners' markets and futures markets. An understanding of cotton marketing involves information of all these various types of markets and a knowledge of the factors affecting prices which in turn tend to determine its consumption as well as production. It is a matter of common experience that out of these markets, the futures markets, by virtue of their organisation and operation, stand at the top of the modern marketing system. It is a futures market that largely determines the prices in all the other markets. It is in an organised market that prices reflect the consensus of trade opinion since the composite judgment of all the operators is being constantly recorded in the current or ruling price of the commodity.

A futures market offers an easy and rapid method for the expression of the mass opinions of both buyers and sellers of the commodity. It furnishes another great advantage in that the price is determined during every hour of the trading day against which both producer and consumer can check any offers they receive. Socially viewed, an organised produce market is a remarkable institutional accomplishment in an economic order in which price is of dominant significance. The futures market has become a beautifully balanced machine which reflects the world's conditions of supply and demand for a particular staple. One of the highest forms of mechanical and technical efficiency in commercial dealings today is therefore found in the commodity futures markets. Moreover, the futures markets and their activities have not only a distinct place in the industrial structure of the present day, but they

are also recognised, as lawful bodies.

SPECIAL SIGNIFICANCE OF THE STUDY TO INDIA

The value of 'futures markets' or methods of organised marketing was discovered early in modern commercial history. These markets or methods are apparently demonstrating their usefulness for an increasing range of commodities. It was not until the 19th century, however, that the commodity 'exchange' reached its full development in the world. Industrial countries like England, Germany, the U.S.A., etc., began to evince some interest in the development of the 'exchange' marketing system and tried to render its mechanism as perfect as possible. But in India, conditions were different. The futures markets were in the beginning condemned as speculative agencies. They were regarded as devices of middlemen to resell products repeatedly at profit to themselves. For a long time past, the futures markets were supposed to be nothing short of gamblers' dens. Even today, at times, it is not uncommon to hear that a futures market, say, for cotton, is the cause of low prices or of high prices². This confusion of ideas is not unnatural. As a matter of fact, it may be stated that in our country all futures markets, either in commodities or securities, are more or less covered with secrecy. This may be due to the fact that those who enjoy the monopoly of dealing in a restricted field believe it to be in their own interest to make a mystery of their craft or profession. But the chief reason that strikes us is that little has been done in India by the State, or by the trade to tear aside this veil of mystery about futures trading in general and organised produce markets in particular. In view of this lamentable state of affairs, and in comparison with the highly developed and efficiently organised marketing system prevailing abroad, it seems that a great deal remains to be done in our country in this direction.

Exchanges for agricultural produce can be compared to the nerve centre of the price system which is the foundation of the prevailing economic order. Its strength or weakness is bound to be forcefully reflected in our present day economic system. Even the marketing surveys conducted by the Marketing Department of the Government of India and of the Provincial Governments do not devote more than a page or two to futures trading. In the present circumstances, it is thus of vital importance to make a special study of the futures markets in India.

This work is an attempt to meet this long-felt need of a systematic study on 'futures trading and futures markets', for a principal agricultural commodity, viz., cotton with special reference to our conditions. Raw cotton in its various stages directly affects the

1 cf. Trade Associations: Their Economic Significance and Legal Status. National Industrial Conference Board; New York, 1925, p. 100.

2 Personal interviews.

fortunes of millions of people in India, and indirectly the entire Indian Economy. Further, there is no agricultural commodity in India for which the futures markets are as extensively used as in the case of cotton. Though its price is affected by world factors, they enter India only through the filter of the futures market. This filter, no doubt, is a complicated mechanism. But its control and component parts are fit subjects of intensive economic study. We have examined the nature and efficiency of this filter with a view to consider its economic significance.

EXISTING LITERATURE ON THE SUBJECT.

A research worker in this field in India is however handicapped chiefly by the fact that there is not only scanty literature on the subject, but some of the important works on the theory and practice of futures trading are also not available in our country.¹ Moreover, hardly do we come across a single commendable volume which deals with the Indian Cotton Futures markets. The only remarkable work that can be said to deal with the marketing of Indian cotton is that of Prof. M. L. Dantwala who in his book, 'The marketing of raw cotton in India,' published in 1937, devotes a few chapters to the study of futures trading. But the scope of his work does not allow him to do that justice which the subject of futures trading and futures markets demands. The main object of the author is the marketing of raw cotton from the field to the exchange, and not the study of futures trading and futures markets. In fact, the work primarily deals with spot cotton and its physical handling.

All that can be referred to as 'literature' on the subject is the daily news-papers, scattered articles and speeches by notable people connected with the trade, and brochures, pamphlets, etc., published occasionally by different institutions or concerns. Considerable difficulty has been felt in making use of these materials because of the want of uniformity as well as reliability in some cases. However, an attempt has been made below to study the subject of the cotton futures trading and futures markets on information gleaned through scattered sources, and verified by personal interviews and discussions with leading cotton merchants in India and also from replies to the questionnaire issued for the purpose.

SCOPE OF THIS WORK.

The present work is concerned with an analytical and comparative study of the world's cotton futures markets with special reference to conditions in India. In other words, the purpose of this study is to critically examine the existing cotton futures trading system and cotton futures markets in India in the light of the experience gained by the overseas sister markets.

We have divided the discussion of the subject matter of this work into two parts, viz., (1) Structure and (2) Services of Futures

¹ e.g. H. C. Emery: Speculation on the Stock and Produce Exchanges of the U.S.A., 1896, Ellison Thomas: The Cotton Trade of Great Britain, 1881 etc.

Trading and Futures Markets. Part I deals with the organisation and mechanism of the cotton futures trading and cotton futures markets in a general way. The various issues connected with the 'futures' cannot, however, be viewed in true perspective unless we are conversant with their history. Therefore a historical review of both futures trading and futures exchanges precedes the discussion of their modern problems. The second chapter thus traces the genesis of 'futures' followed by the analysis of 'futures' in chapter third. The fourth chapter deals with the structure and principles of organisation of the futures markets illustrated by a concrete description of the world's cotton exchanges in the following chapter. At the end of the fifth chapter we have prepared a comparative statement showing the principal features of cotton futures markets of the world. In the sixth chapter the clearing of 'futures' has been explained. This has involved the study of methods and machinery of a clearing organisation.

Part II is devoted to the discussion of the economic services of cotton futures trading and futures markets; and their regulation. The importance of these services can never be over-estimated. A futures exchange offers so many services to the person who handles the commodity that it has become almost indispensable in the orderly marketing of many of the world's staples of commerce. The first and foremost service rendered by a futures market to the cotton world is that of hedging. Hence, this part opens with the chapter on 'Principles and practice of hedging.' It may be mentioned that the justification of the existence and maintenance of futures exchanges lies in the facilities afforded by them for hedging. This is followed by two chapters examining the special problems of hedge contracts in India, particularly, in the Bombay market and Universal Standards for Indian Cotton. The next chapter is devoted to speculation in commodities upon which the theory of hedging mainly rests. In chapter eleven we have studied the parity and 'badla' or straddle operations which have become most popular with the cotton business between any two markets of the world on the basis of parity calculations and keep the prices in different markets constantly adjusted to each other. Chapter twelve deals with cotton prices. Here we have examined the factors affecting the cotton prices, and the ability or otherwise of the trade to successfully forecast the price in advance. Obviously, the lack of such knowledge has often led to the absurdity that a large crop has been sold at a lower total price. In chapter thirteen the option business or what is known in India as 'Teji-mandi' business is discussed in its various aspects including its effects upon prices. The legal nature of Teji-mandi transactions has also been examined.

The problems of control and regulation of futures trading as well as futures markets have been discussed in the chapter fourteen. It is devoted to the important issues pending before the Indian

markets, such as, the questions of 'unitary control,' 'the system of panels,' constitution of the Board, etc., and gives the existing systems of regulation of futures trading in other countries in the light of which the defects of our system may be realised and improved upon.

The last chapter to this part brings out all the principal economic services rendered by a cotton futures market to agriculture, trade and industry. It sets forth the summary and main conclusions of our study. It also indicates the economic importance and the place of a futures market in distribution, especially in the system of marketing an agricultural produce such as cotton, wheat, rice, etc.

It will not be considered out of place to say that opinions on these vital matters are bound to differ. Such of them as are offered here are not in a spirit of unflinching dogmatism or unshakable faith, but only as logical conclusions to the entire description and discussion about the nature and structure of the cotton exchanges of India.

CHAPTER II

GENESIS OF FUTURES TRADING IN COTTON

IT has been said that exact dates for the beginning of trading in cotton contracts for future delivery are not definitely known. However, it is certain that trading existed in effect before definite rules and regulations were adopted for the markets which originated this method of buying and selling. After trading had developed, it was found necessary to form bye-laws governing these transactions and such bye-laws were changed from time to time as the operations of the markets made such changes necessary.

1. COTTON TRADE TILL THE FIRST HALF OF THE NINETEENTH CENTURY.

Early Trading: The fact that India has been the home of cotton and the cotton trade from the earliest times has been admitted on all hands. It was only during the eighteenth century that other countries took to cotton cultivation on a sufficiently large scale. Among them the United States of America and Egypt were the most important. Prior to and during the eighteenth century the manufacture of cotton goods was carried on by spinners and weavers in their homes. Raw cotton was obtained from neighbouring markets. The system of marketing was simple. Moreover, prior to 1818 there were no telegraph or cable lines and no railroads and steamboats regularly crossed the oceans. In short, means of communication measured by modern standards, were poor. In consequence, trading in cotton as practised today was not possible. In the early days of the nineteenth century marketing problems were thus strictly local and the marketing of cotton was a comparatively simple procedure.

Industrial Revolution: Then came the Industrial Revolution and the whole phenomena of cotton trade was totally changed in all its aspects. The Industrial Revolution overpowered the barriers of nature. Inventions both in machinery and transport stimulated the demand for cotton. This revolutionary era was characterised by an enormous increase in the trade.¹ A change in the nature, volume and location of the cotton industry took place. It is estimated that in little more than twenty years almost all the great inventions were made and "the cotton plant of the Orient" was regarded as historically responsible for a major share in the Industrial Revolution.

Growth of Foreign Trade: As a result of the Industrial Revolution imports of cotton into England increased rapidly. India and

¹ A. B. Scherer: "Cotton as a World Power" 1916, p 52.

the U.S.A. were the principal sources of supply. In early days, as the total quantity of cotton imports was comparatively small there was obviously not enough business for any broker to specialise in cotton exclusively. At the commencement of the last century England's import of cotton from India was about 15,000 bales of 400 lbs. each. The following figures² show what remarkable fluctuations took place in the imports during the first half of the nineteenth century:

Years	Bales
1810	19,000
1818	2,47,000
1821	20,000
1841	2,78,000
1848	49,000

This phenomenal increase is attributed to the rapid development of progressive means of transport. In 1819 the first steamboat crossed the Atlantic Ocean. Since then during the next half of the century, means of communication gradually improved. A steam railway line was put into operation in 1829. The Liverpool-Manchester Railway was opened in 1830. This facilitated the growth of the Liverpool market. The unusual demand for raw cotton brought about a remarkable change in the system of marketing in both the producing and consuming countries. The Industrial Revolution gave rise to new economic problems. In fact, with every development in transport and communication services, important milestones were laid in the process of marketing and drastic changes in trade methods took place.

'To Arrive' Contracts: With the increase in demand cotton production was improved and expanded in the producing countries. To facilitate import a system of sale by description had to be evolved. This was done in the early years of the nineteenth century. Formerly supplies were usually described by the name of the 'country of origin.' Improvements in cultivation and handling contributed greatly to the development of a system of grading. The system of grading was in use for sugar and coffee. A similar system was also in use for Sea Island Cotton in 1805.³ In the case of American cotton it was all from practically one source and handled uniformly by the saw-gin. This made it possible for the sellers to sort out the cotton into even running lots. These lots were selected on the ground of their being of uniform grade. Somewhere about 1810 the custom of offering cotton for sale by sample was introduced. However, transportation was still poor and it took several weeks for cotton to reach Lancashire during which time changes in price would probably take place. But risk was comparatively negligible, because there were no communication

2 A. S. Prace: Indian Cotton: 1914: p.53.

3 J. A. Todd: The Cotton World: 1927, p.61.

services or 'liners' and the goods as well as news travelled together. Under these circumstances, all the advantages of sampling were not fully realisable. In 1840, the Cunard Line—a regular mail service—was established. This made it possible to send samples and advices in advance. Consequently, a drastic change in the technique of the cotton trade became necessary. There arose the discrepancy between the speed of the transport service and that of the regular mail service. As a result, the new system of trading known as cotton 'to arrive' quickly developed. By this system, merchants were advised of cotton coming by certain ships and while it was at sea, samples could be offered at Liverpool or any other buying market 'to arrive' about the time the ship could be expected. An operator might buy cotton 'to arrive' on the basis of samples and wait for a rise in price and then sell it at a profit. This would occur a number of times.⁴ Thus, the practice of buying and selling the supplies while afloat was of outstanding importance in the development of futures trading in cotton.

The Liverpool Cotton Brokers' Association: Another important change in the process of marketing raw cotton was brought about by the appearance of the middleman between the consuming centre and the producing area. Since the quantity of raw material demanded and consumed by factories was considerable, it was the business of certain men to buy and furnish the spinner with the required raw material. Gradually a number of brokers began to deal increasingly in cotton due to the growing volume of trade. The increased share which Liverpool could secure in the import trade meant more business for brokers who were inclined to specialise in cotton alone. At this time attempts were made to organise the Liverpool market and put it on a sound basis. Brokers began to issue periodical reports giving statistics relating to imports, sales, etc. They assembled at one place to collect these statistical data. The reports were published in the form of Trade Circulars.⁵ But these reports were made on individual initiative and hence, they multiplied in numbers and varied in figures. To avoid multiplication and variation, 'a General Circular' was published in 1832. This Circular contained all the important statistics pertaining to the cotton trade. Figures were given for imports, sales, stocks, and current prices of all foreign cottons along with those for colonial produce. The idea of a cotton trade association sprang out of these periodical meetings and it was started in 1841 under the style of the Cotton Brokers' Association, Liverpool.

2. THE AMERICAN CIVIL WAR AND AFTER

Trading Prior to the Civil War: From what has been narrated above, it must have been clear that vast developments in the cotton

⁴ It should however be pointed out that facilities to speculate in the modern sense of the term i.e. facilities for selling short were not yet developed.

⁵ Many interesting and typical examples of this practice are cited by Dr J. E. Boyle in his book "Cotton and the New Orleans Cotton Exchange," 1934.

trade, particularly with the growth of the cotton industry in England, took place. Producing countries developed their resources and produced more and more with the idea of meeting the ever-increasing requirements of industrial countries. Besides, raw cotton producing countries like the U.S.A. and India began to build up their own textile industry. Their developments added to the demand for raw cotton. Naturally, therefore, local markets had to enlarge and widen their spheres of activity. It was at this stage that the real trouble in marketing of cotton arose. Economic problems began to make their appearance in the form of the complexity of distribution. As a result, central markets were established for storage and sale of agricultural staples. Thus, the process of marketing cotton evolved from primary to secondary and from secondary to a central market, like that of Bombay or New Orleans. Stated otherwise, from the early days of selling cotton at the village markets, the farmer began to send his produce to the nearest town market, and from this local or secondary market, cotton was sold to the central market. These central markets were usually situated at ports. For instance in India, the Cotton Market was situated at Bombay. The idea was to facilitate the export of cotton. Moreover, the timely invention of the telegraph in 1844 made in-roads into the old system of marketing. Then came the Crimean War and the demand for cotton increased. It will be appropriate here to observe that the trading in cotton before the American Civil War, either in Bombay or New Orleans was in the form of the old-fashioned commission business, similar to the business of handling grain and other agricultural products. At that time most of the cotton was sold through commission agents, who resided in these ports and who were in most instances the intermediaries between the producers and the consumers. Market conditions were still not satisfactory for want of modern means of communication such as a cable service. Broadly speaking about the time of the Civil War, communications between the different continents were generally through the medium of sailing vessels and a few steamboats which carried the mails. In fact, there was no definite or even general knowledge in the cotton producing areas of the prices ruling in an importing centre like Liverpool; save, when an order was received to buy and ship. Larger issues affecting prices such as the political situation in Europe, war or rumours of wars, only filtered through weeks and months after they occurred. Further, there was no central agency from which quotations might be derived and distributed. In other words, though the industrial countries depended mostly on producing countries, there were no organised cotton markets nor dealings in futures.

The Cotton Famine: In 1862 there started the Civil War in America. It adversely affected the industrial countries and meant a cotton famine in general and for Lancashire in particular. The U.S.A. during 1856-61 supplied practically half the stocks annually

exchanged in these years in the cotton markets of the world. The war entirely dislocated the American cotton trade. The consequences of the war may be best judged from the following table which shows the reduction in the cotton crop:⁶

U.S. Cotton Crop (in million bales of 500 lbs. each)

1861-62	1.8
1862-63	1.5
1863-64	.5
1864-65	.3

Widespread Speculation: It was on account of this that Indian cotton was largely in demand. Prices began to advance. Still the demand from Liverpool for Indian cotton was very strong. This contributed to the high prices prevailing at that time. In the year 1863 the enormous demand and the high prices paid for cotton had the effect of bringing to the Bombay market every available bale in India. The average price of Surat cotton which prior to 1863 was sold in the Liverpool market at 3 to 5 d. per lb. began to fetch as much as 20 to 40d. Similarly, the average price of Middling at Liverpool which was 7 19/20d. per lb. for the years 1856-61 began to rise and soared up to 20 1/2d. This shows that prices rose high, and thus stimulated the speculative instinct of traders. Speculation increased and mounted rapidly to an enormous proportion by 1863.⁷ Supply was far less than during the preceding years, but the rapidity of turnover more than offset the shortage of supply. Similarly, Middling cotton in New York was sold for 1.00 dollars a lb. This might be attributed partly to the fluctuations in the value of currency and partly to the fact that no regular shipments to New York were made during the greater part of the war. The fierce demand and uncertain as well as inadequate supply gave opportunity for vast and sudden profits. The same thing happened in Liverpool where some speculators bought cotton 'to arrive' even six months ahead at prices five times greater than its normal value.⁸

The Installation of Trans-Atlantic Cable: No sooner did the American Civil War terminate than came an important development in the means of communication. In 1866 the Atlantic Cable was successfully laid. It brought about a revolution in the technique of trading in cotton. Instead of selling from samples 'to arrive' cotton was now offered on a specified grade in the consuming markets to sail in the near future, say, one or two months later. This rapid means of communication enabled world cotton markets to receive immediate information as to prices and the movements of actual cotton both in the fields and in transit. It also facilitated

⁶ Vakil and Murarjan: *Currency and Prices in India*, 1926, p.194.

⁷ A contemporary of this period remarked "Everyone in Bombay appeared to have become wild with the spirit of speculation."

⁸ A. B. Cox: *Evolution of cotton marketing*, 1925, p.16.

the element of speculation to a great extent in the following years. But the character of speculation was altogether changed now. Prior to the war, speculation was, if at all it can be called speculation, in the spot or ready cotton; whereas after the war, the term speculation achieved its modern significance and was applied in its real sense to the sale and purchase of cotton contracts which were meant to be offset at the earliest opportunity. Speculative operations developed on the 'short' side of the market at this time and there was a great demand for short positions of a contract after the close of the war.

The New York Board of Cotton Brokers: The Trans-Atlantic cable facilitated the demand of selling and buying cotton on contracts for future delivery. During the following years this system developed to a considerable extent and it is likely that futures trading in New York first reached substantial proportions in 1868.⁹ At this stage it was suggested that there was a Gold Board in New York for the purpose of centralising and controlling the business in contracts for gold, and it was thought advisable to start a similar Board for dealing in cotton contracts. The brokers organised themselves into an association called the New York Board of Cotton Brokers in 1868. This organisation was similar to the one we have noted in the case of Liverpool. It may be observed that many of the trade practices which led to the organisation of futures markets originated in Liverpool.

3. DEVELOPMENT OF FUTURES TRADING.

For some years after the termination of the conflict in America and before the establishment of a modern cotton exchange, various schemes were devised to overcome the risks which had become increasingly unbearable as a result of the introduction of the cable. Amongst them only two methods may be considered here. First, we may take up Hubbard's anecdote on origin of futures and next, the story of Mr. Rew of Liverpool.

Hubbard's Anecdote: An old-time cotton merchant once related to Mr. Hubbard¹⁰ an anecdote on the origin of futures. The story runs that in the late sixties clipper ships carried away cotton goods made in the New England Mills to be sold in China. Clippers had a captain selected for mercantile ability as well as seamanship. On one occasion, just after the close of the Civil War the Chinese merchant, in the course of dealings with the captain inquired whether the captain could enter into a contract with him to deliver an equal amount of goods at the same price at the next voyage, for

⁹ In reviewing the New York market for December, 1868, the New Orleans 'Price Current' observed, "In December, there was a fair demand and prices for the most part were steady, though occasionally affected by the contracting for future delivery, which now began to be a regular feature in the market, at prices 1 or two cents below those current for spot lots." This makes it clear that futures trading was then an established practice in New York.

¹⁰ W. H. Hubbard: Cotton and the cotton market, 1923, pp.312-314.

the merchant liked the goods as well as the price. The captain liked the idea but replied that he dared not make such a sale until he had gone home and consulted the owners. It was then agreed that the proposition should be put to them with the idea that on his next trip the captain would be in a position to sell goods for the subsequent voyage. On his return the captain reported the conversation which was very much appreciated by the shippers who asked the mills to work out this new proposal. Mills, in turn, called upon the cotton traders who agreed to sell cotton for long distance delivery to mills. As soon as this was known to the other operators, they were not slow in following it up, and the result according to Mr. Hubbard was the trading in forward contracts, a process known today as hedging or futures trading.

Mr. John Rew of Liverpool: A similar story is related in connection with the Liverpool Cotton Trade. After the civil war a new conception of the cotton business took shape in the mind of the late Mr. John Rew of Liverpool. Mr. Rew saw that the newly laid Atlantic cable made it possible for a cotton merchant in Liverpool to ascertain with quickness the price at which actual cotton could be bought in the overseas markets and the approximate dates at which it could be shipped to England. He saw also that, if the price that was being bid in Liverpool for 'cotton to arrive' was high enough to enable him to buy cotton in the U.S.A. and simultaneously sell contracts for the same 'cotton to arrive' in Liverpool two or three months later, he could enter into the transactions with probable safety. Afterwards, when his cotton reached Liverpool he could either deliver it to the parties to whom he had sold the contract, or if some spinner was willing to pay a higher price than the holder of the contract had agreed to pay, he could buy back his contract and sell cotton to the spinner with a larger profit to himself. Following this successful venture of Mr. Rew, other traders in all the markets began to deal in contracts for future delivery. In this way the next epoch-making development in the system of marketing of raw cotton took place in the world.

Adoption of a Basis Contract: Market reports and news affecting price were received daily and more frequently. This rendered the old plan of selling by sample cotton 'to arrive', unsatisfactory. We have noticed that sales were effected on 'country of origin', 'samples' and 'even running lots'. These methods, however, did not suit the latest development. Some basis on which price could for the time being be fixed and relied upon had to be evolved, so that business could be carried on without samples or naming of any particular variety. In other words, the standardisation of the contract was badly needed. Hence, a new scheme was devised to take the place of the old one. Cotton was then sold on a "basis contract" e.g. "Basis Middling". In this way they adopted a basic grade in these early forms of trading with adjustments if other grades were tendered. The scheme was favoured by all since it

gave a greater range and a better choice in respect of cotton to be delivered.

4. ESTABLISHMENT OF ORGANISED MARKETS.

The marketing problems so increased in complexity as to make it imperative to devise a marketing machinery. This was accomplished by the establishment of organised cotton markets for the purpose of facilitating and regulating the trading in futures contracts, generally known as 'futures trading.'

Historical Survey of the World Exchanges: The history of the organisations of the world exchanges for carrying on futures trading in a more or less orderly way, tells us that the first exchange dealing in world commodities was at Antwerp.¹¹ But with the decline of Antwerp as a world exchange in the seventies of the sixteenth century, Amsterdam came to be the world's great exchange, where dealings in futures were made in buying and selling of grain. It quickly spread to other commodities such as, coffee, oil and oil-seeds, with the result that it soon developed into a technique similar to that of the present day. In Japan, on the other hand, futures trading in rice achieved a great importance from early days. The rice exchanges were established in the first quarter of the eighteenth century and futures trading in its modern sense commenced on a considerable scale after 1730. There were various other important produce exchanges preceding the modern organised markets of the world. Among them the first and foremost leading futures market was the Chicago Board of Trade. Organised in 1848 as a general market place for commodities, it received a charter from the state of Illinois in 1859. Rules and Regulations governing the conduct of the trade were adopted in 1865. They set forth the rights of both parties. Their adoption ushered in the system of futures trading providing the basis for the highly standardised futures contract of today. This was followed by the New York Produce Exchange. It had existed under different names since 1850, but it was not incorporated until 1862, when it received a charter from the New York State. Mention should also be made of the London and Liverpool Corn Trade Associations, whose formation dates back to 1853. From this brief survey of organised produce markets of the world, it will be observed that futures trading has been in existence for centuries. But the organised speculation on the cotton exchanges is of more recent development. This system was neither known nor discovered nor availed of or planned in advance by any person. It has been gradually evolved during the last century and a half to meet the necessities of growers in selling, of consumers in buying and of distributors in buying and selling.

¹¹ R. H. Hibbard: *Marketing of Agricultural Products*, 1923, pp 114-124.

Growth of Cotton Exchanges: Let us now briefly describe the evolution of cotton exchanges in the following cities: Liverpool, New York, New Orleans, Bombay, Bremen, Havre, Alexandria, Chicago, Osaka, Karachi and Ahmedabad—the more important organised cotton markets of the world.¹²

Liverpool: Mention has already been made of the organisation of the Liverpool Cotton Brokers' Association in 1841. But they did not feel the necessity of formulating written rules and regulations governing the conduct of business up to 1863, when the size of speculative operations and continuous disputes necessitated the written rules governing the trade in 'to arrive' and 'futures' contracts. However, the association was influential enough to fix and expand an unwritten code of professional etiquette in dealings. A further advance was made when they commenced the publication of an Official Circular in 1864. After the termination of the Civil War and the completion of the Cable, trading in futures became so vast and complicated as to necessitate the establishment of a clearing machinery. This was accomplished by the formation of a cotton clearing house in 1876 which was followed up by a Cotton Bank in 1878. The right of using the clearing house was refused to anyone who was not a member of the Cotton Brokers' Association. Merchants doing business in futures were therefore handicapped to the extent of the amount of brokerage they were charged. This innovation gave rise to considerable friction between importers and brokers. Many differences arose between them but brokers did not give way to merchants under any circumstances. In consequence, merchants formed a new association, called the Liverpool Cotton Exchange in 1881. Hence the position of both these rival bodies became absurd. In the end, differences were settled and the two bodies were absorbed into a new organisation under the style of The Liverpool Cotton Association. This body was incorporated in 1882. The introduction of the system of periodical settlement was the next stage in its evolution and this became universal in 1884. The tendency at the time was towards providing a variety of contracts to suit the requirements of different kinds of cotton. Hence, the introduction of the Egyptian contract in 1890, the 'Empire and Miscellaneous' contract in 1925 and the 'East Indian' in 1930.

New York: In New York the development of cotton futures trading naturally followed more or less the same lines as in Liverpool, with the exception that as a spot market the former was less important than the latter. We have already mentioned that the New York Board of Cotton Brokers was organised in 1868. By 1869 the trade in futures was well established. The Board needed expansion and hence, this body was succeeded by the formation of the New York Cotton Exchange in 1870. In 1871 it received

¹² Cotton futures markets also exist in the following places: Surat, Indore, Sao Paulo and Shanghai.

a special charter of incorporation from the State of New York. Other stages of evolution of the New York cotton market were the same as those in Liverpool.

New Orleans: In the U.S.A., following the lead of New York in 1870 another important exchange was formed in the South. This was the New Orleans Cotton Exchange which was organised in 1871 under the general laws of the State of Louisiana. The important point to be noted in connection with this exchange is that, since New Orleans was essentially a spot market, it did not begin trading in futures till 1880. The exchange in early years devoted its energy to develop trading in spot cotton, but the constant interest which developed in buying and selling of cotton for future delivery led to the inauguration of active futures trading in 1881. Since then this branch of cotton business has grown rapidly. Other stages of growth were as usual.

Bombay: As soon as the cotton exchanges were established in England and the U.S.A., we in this country followed them up. As mentioned above, cotton trade was carried on since the early days of the nineteenth century in Bombay, first at the Town Hall and then at Colaba where it remained for a long period of nearly 75 years. With its facilities for landing cotton brought by country crafts and for loading vessels in the Bombay Harbour and the ample open space then around it, Colaba at that time was the most convenient site for the trade. In fact, Colaba had proved to be a very popular place to businessmen in those days. This was on account of the fact that the largest proportion of Indian Cotton crop found its way to Bombay—the largest cotton port of the East. Thus the importance of Bombay was in its being not only a spot market but also an exporting centre. Trade gradually developed in spot and futures business. After the American Civil War trading in futures assumed quite a considerable proportion. But up to now there was no organised body as such to control the business in futures. Hence, trade became wild and buyers who were mostly foreigners were upset. Some sort of regulation was needed. This was effected by a body of Europeans who established the Bombay Cotton Trade Association in 1875. The association did not allow Indians to be represented either on the Board of Directors or on any of its various committees, in spite of the fact that the association framed rules and regulations for the conduct of business both in spot and futures including arbitration. At any rate, it may be said that this was the first important step in the evolution of the organised cotton markets in India, for, with its inception a futures market in Bombay came into formal existence.

The trading in futures increased and a huge amount of futures contracts became a regular feature of the market. Since this association was a purely European body, discontent spread amongst Indians and reached its height in 1892. As a result, the formation of a rival body known as the Bombay Cotton Exchange came into

existence in that year. On this body, the majority of members were Indians, but, as opposed to the former organisation, this body was not exclusively for Indians. A few foreigners also enrolled themselves as members. Rivalry between the two organisations continued and business transacted was made subject to the rules and regulations of one or the other body. The dealers however were not satisfied and the Bombay Cotton Brokers' Association was brought into existence in 1915. The main object of this body was to carry on and regulate dealings in futures business only.

It will not be out of place to note here that the development of futures trading in India was peculiar in its 'Modus Operandi'. It was peculiar in the sense that Bombay did not follow the stages of evolution of the overseas markets. It developed rather in its own way without the establishment of (1) a basis contract,¹³ (2) a clearing house, and (3) periodical settlements. Consequently, when violent fluctuations occurred in the Bombay Cotton market, it brought about a crisis. The year 1917 was the case in point, when entire cotton trade was dislocated. The stability of firms was greatly threatened and large amounts of money were at stake. Considerable irregularity was the order of the day. Again, in 1918, prices rose to an unheard of level primarily due to the conditions created by the World War of 1914. They were aggravated by the unusual magnitude of speculative manipulation. The Government of India had therefore to step in to regulate the cotton trade. Under the Defence of India Act they constituted the Cotton Contracts Committee in 1918, to control the cotton trading in Bombay. A clearing house was established and a system of periodical settlement was introduced. In 1919, the Committee was replaced by the Cotton Contracts Board, a body constituted under the Bombay Cotton Contracts Act I of 1919. The Government thereafter invited this body to form a central cotton association which was formed under the style of the East India Cotton Association in 1922.

Bremen: When cotton markets were being organised and put on a sound basis in England, America and India, the markets on the Continent did not lag behind. The first among them in point of time was the Bremen Cotton Exchange in Germany. Merchants and brokers founded an association designated, first, as the committee for cotton trade in Bremen, in 1871.¹⁴ This name was changed a few years later to Bremen Cotton Exchange—Bremer Baumwollborse. As contracts for future delivery developed and increased in magnitude, the rules were established for the regulation of trade. A system of sworn brokers was also provided. But the World War told heavily upon the Bremen Cotton Trade and even after the close of the war, conditions for a pretty long time remained unsettled. It was, therefore, not till 1925 that the Bremen

¹³ There was the specific growth contract.

¹⁴ The Cotton Trade Journal International Edition 1938 pp 80-90.

Cotton Futures market was reopened and reorganised in its present form.

Havre: A second important organised market for dealings in cotton futures on the Continent was the establishment of the Havre Exchange known as "Le Havre Bourse". The Havre futures market dates back to 1880 and trading in contracts for future delivery in cotton commenced somewhere about 1882, when French spinners, as a rule, began to buy on 'call' based on their market.¹⁵ This brought great importance to Havre. The peculiar feature of this market was that though brokers dealt in futures contracts, the clearing house cleared the contracts for merchants only. Theoretically they had an entirely different membership, since, only a member of the Brokers' Society had a right to negotiate contracts for future delivery. Moreover, there was no separately organised market for trading in cotton futures.

Alexandria: It has been claimed that dealings in cotton futures at Alexandria have taken place since 1861.¹⁶ But it seems probable that it was not until 1883 that the necessity of an association to set up regulations was felt. Up to now a few big merchants used to trade in contracts for future delivery and usually they bought back or sold out before the due date. A strange case occurred in 1883 when a certain party having sold futures contracts insisted on delivering the cotton. This brought home the necessity of having a written code of rules and regulations relating to the conduct of trading on a futures market. Hence the formation of "Association Cotonniere d' Alexandrie" in 1883.

Chicago: Though the Chicago Board of Trade is one of the oldest modern commodity futures markets of the world, the trading on it, up to a few years ago, was confined to grains and provisions. The Board instituted trading in cotton futures only recently in 1924. It has been claimed that Chicago was the first to establish the 50-bale contract, the desirability of which has been fully demonstrated by the rapid growth of the market since such a unit of trading was adopted. Likewise, it is also advanced that Chicago pioneered the establishment of 'Southern delivery' at Houston and Galveston.

Osaka: In Osaka, a futures exchange called 'Sampin' was established in 1894. It was originally planned that there would be trading in raw cotton, cotton yarn and cotton cloth. But trading has not been instituted in cotton cloth. From 1894 to 1927, the trading was confined to cotton yarn only. In 1927, trading was also inaugurated in raw cotton.¹⁷

Karachi: The Karachi Cotton Association came into existence

¹⁵ The Cotton Trade Journal: International Edition: 1933: p.63.

¹⁶ The Cotton Trade Journal: International Edition: 1931, p 184.

¹⁷ A. H. Garude; Cotton goes to Market, 1935, p. 166. (Footnote).

in the year 1933. Karachi is essentially a collecting harbour for cotton from Sind, the Punjab and the North-West Frontier Province. Prior to the World War cotton from Karachi was generally carried to Bombay in sailing vessels and steamships. There was no organisation, and futures trading was done in Bombay.¹⁸ After the war, Karachi appeared on the list of the cotton markets as an exporting centre and the individual contracts came into vogue. Contracts were based on buyers' own selection. In spite of this trading in futures developed and the Sind contract became the most speculative contract.

It may here be pointed out that traders in Karachi used to meet on a public road for futures business. There was no particular association to look after the business although there were two organised bodies in existence under whose auspices two separate sets of contracts existed. These bodies were the Karachi Chamber of Commerce and the Karachi Indian Merchants' Association. Both had interest in the cotton trade and hence, a meeting of 8 representatives of each was called in August 1926. They formed in turn the Karachi Joint Cotton Committee. The first step towards the organisation of the cotton trade thus began with the inception of the joint committee. The then marketing system was not in consonance with the requirements of the cotton trade that was fast growing. It called for radical and immediate reforms. The committee therefore brought about: (1) the establishment of a single agency to regulate the cotton trade of Karachi; (2) the introduction of a uniform contract for futures dealings, and (3) the organisation of a regular forward market in Karachi.¹⁹ These reforms paved a way for the establishment of a central association. In 1928 business in futures having expanded greatly, all futures contracts were subjected to periodical settlements, a system not in existence before. In 1929, the two parent bodies expressed themselves in favour of an independent association. Generally speaking it was their intention to prepare the ground gradually for the establishment of a central association with a clearing house on the lines of that in Bombay. In 1930, they first published bye-laws and rules governing the marketing of cotton. The joint committee then considered the advisability of forming an independent association incorporated under the Companies Act. A sub-committee was appointed for the purpose. It presented a unanimous report outlining the broad principles on which the association was to be formed. Finally, at a meeting of registered subscribers to the committee held in March 1933, a resolution was adopted accepting the proposition of an independent association and authorising the joint committee to proceed with the formation of the association. The association was duly registered in April 1933 and the committee handed over charge to it in July 1933.

18 Personal investigation.

19 Report of the Karachi Joint Cotton Committee for the period 1927-31.

Ahmedabad: Finally, we may refer to the latest organised cotton market evolved at Ahmedabad. The West India Cotton Association came into existence in the middle of 1947.²⁰ The Ahmedabad Cotton Brokers' Association was formed in the year 1895. In course of time as the Ahmedabad cotton trade and market began to grow and expand the cotton traders felt the need of an organisation of their own. Hence, they formed the association styled as "The Ahmedabad Cotton Exchange Association" in 1934. Another association of cotton dealers was organised in 1940 under the style of "The Gujarat Cotton Brokers' Association." With a view to get a statutory recognition, all these bodies got amalgamated and they then formed a new cotton association for Ahmedabad in May 1947 and styled it as "The West India Cotton Association".

5. CONCLUSION.

We conclude that the cotton exchange is the product of the needs of the commercial evolution of the last century. As a result of the natural growth of the country both in the direction of production and consumption of raw materials, together with the impetus given to this growth by better means of transport, the marketing process changed from a simple local transaction to one of wide, complex proportions. It is worthy of note to record the historical evidence which goes to show, as we have seen, that the spot business in cotton came first, then 'to arrive' contracts, and out of these two developed our modern system of futures market. The growth of cotton exchanges as economic institutions for distribution was as natural as the growth of any other economic organisation. In fact, as the need for marketing machinery grew, the mechanism was evolved. There is however no particular date from which one can say that this practice began or had its origin. Instead it simply evolved out of the trading customs of the time. The cotton exchange marketing system is thus the evolutionary product of trial-and-error marketing practices that have followed a course of natural development from disorganisation to organisation.

20 Ref. to the Brochure published by the West India Cotton Association; June, 1947.

CHAPTER III

ANALYSIS OF A FUTURES CONTRACT

HAVING traced the genesis of futures trading and reviewed the development of the leading cotton futures markets, we are now in a better position to analyse the futures contract. For this purpose, in the first instance, we need to examine the pre-requisites of futures trading and see how far a commodity like cotton fulfils them. Secondly, the characteristics of a futures contract as distinguished from a spot contract will be noted, and finally, the legality of a futures contract will be discussed.

1. PRE-REQUISITES OF FUTURES TRADING

In order to be suitable for trading on an organised market a commodity must have durability, homogeneity large, uncertain and uncontrolled supply and demand, must be capable of standardisation and its price must be subject to wide fluctuations in a free, continuous and competitive market.¹ Each of these conditions favours the successful development of futures trading.

Durability: The chief condition needed for rendering any commodity suitable for a futures market is that it must be durable and should not be quickly perishable. This condition is fulfilled by cotton to a comparatively greater degree than any other agricultural product. The importance of this condition lies in the fact that under the futures contract deliveries are deferred to a future date. For instance, Jarilla cotton sold for July delivery in January would necessitate a pretty long period during which cotton will have to be carried. Delivery dates may be several months in advance of production and if a commodity is not sufficiently durable, successful development of futures trading will be restricted to that extent. It is therefore laid down that the commodity must be capable of yielding time utility. Cotton does comply with this in the sense that the supply of the present is capable of continuing as the supply of the future.

Adequate Storage Facilities: For this purpose futures trading demands the provision of adequate storage facilities at market centres or elsewhere, where delivery is admitted. For instance, in Bombay we have got a large number of godowns at Sewree where cotton is stored and deliveries made as well as received. But the case of New York is different, since, deliveries on a New York contract are admitted at a number of places in the United States and storage facilities have to be provided accordingly. Such a provision permits the commodity to be stored during the months

¹ International Chamber of Commerce: Trading in futures: Brochure No. 10, 1931.

when the movement of production is heavy and makes it possible to effect forward sales. It gives them an advantage of holding and awaiting higher prices because of the possibility of either smaller stocks or larger demand in future. Storage facilities not only give an advantage to the seller but also to the buyer, for he is interested in knowing that the quality will not be adversely affected. Thus mere durability without the provision of adequate storage facilities does not render the commodity fit for futures trading. Conversely, such a provision without essential durability is of little use for futures trading.

Homogeneity: A third requirement is that the commodity must be homogeneous, both in character and quality. This implies in a general way that lots of a particular commodity should be interchangeable and the commodity must be such that contracts with reference to it can be made without any thought of identity. It is needless to mention that cotton has been produced in sufficient volume of homogeneous lots. One lot of a given growth of cotton is just as acceptable to the buyer or the seller as any other lot of that style. The quality of cotton can be determined by tests that yield almost identical results when applied by different persons. But for practical purposes, the commodity must be capable of quick and easy test. If the testing takes too long or costs too much it will either disqualify the commodity for organised trading or at least reduce it to one of spot trading. Homogeneity affords more freedom to buyers and sellers on the futures markets. A commodity whose units are not homogeneous would be a difficult one for futures trading.

Classification: In the fourth place, the product must be of such a character as to permit reasonable standardisation. It must be one that can be numbered, weighed, or measured with accuracy obvious to all. It is essential that the commodity be graded when bought and sold on a futures market. It is fundamentally an important condition to futures trading in the sense that a commodity shall be capable of accurate classification into a fairly small number of grades so that buyers may have some idea of what will be delivered to them.² If the lots of a commodity are homogeneous, it is easy to establish contiguous grades. Nevertheless, it is very difficult to find a commodity whose lots are exactly alike, since differences in grade arise from a variety of reasons. For instance, one lot of cotton would differ to a certain extent from another in matters of staple, cleanliness, strength, colour, etc. To overcome these difficulties classification is needed. Thus there are well-defined grades which are standardised for a particular growth and are readily identified by the trade.

Large Supply and Demand: It is necessary that the supply of

² Tea has to countenance difficulty of grading as a result of which it cannot lend itself to futures trading.

the commodity and the demand for it shall under all ordinary conditions of the trade, be quite large. Without this element of large supply and demand, even if all other essentials were complied with futures trading in the commodity would not be possible. So far as cotton is concerned, we know that on the one hand the fields of India, the U.S.A., Egypt, China, etc., give us so vast a quantity as to make the supply felt heavily on the market. On the other hand, the factories of England, the Continent of Europe, the U.S.A., India, Japan, etc., consume so large a quantity that the pressure of demand is equally felt. Thus the world's aggregate supply and demand as well as individual supply and demand for a particular growth render it possible for cotton to be easily eligible for futures trading. The purpose of this qualification is apparent. It seems necessary to protect the traders against the danger of finding the entire available supply of a particular growth bought up and held off the market when they try to obtain the commodity to fulfil their contracts. Further, if the supply and demand are not large enough, the commodity would expose itself to cornering and prices may tend to be manipulated to the disadvantage of traders. Hence, the demand and supply of the commodity must be worldwide.

Uncertainty of Supply and Demand: Over and above the large volume of supply and demand, both these economic forces must be uncertain in their character. If supply and demand are certain, prices would readily be adjusted without the necessity of a highly technical machinery like a futures market. Even the certainty of one would render the commodity out of question, for, prices would then most probably be controlled by the opposite force only. When both these factors are not known in advance, there is ample room for the development of futures trading. Cotton is highly qualified and usually well-known in this respect. Its supply and demand are not only uncertain but also subject to a multiplicity of causes which we shall examine in detail in the chapter on prices.

Uncontrolled Supply and Demand: The large volume and uncertainty of supply and demand are not the only factors making for a successful development of futures trading, but they must also be entirely uncontrolled and unrestricted. Only very recently this factor has come into prominence. It is attributed to the policy adopted by various Governments of producing countries. For instance, the Egyptian Government have tried to lift artificially the prices of their cotton by holding it off the market. Similarly, the U.S.A. have not only tried to raise artificially the prices of agricultural produce like cotton and wheat, but they have also gone a step further in that they have tried to curtail the available supply by reducing the acreage. However, no attempts, either at pegging the price by State policy or manipulation have been successful in the case of cotton. Cotton has therefore stood the acid test of futures trading in recent years.

Wide Fluctuations: This is not all. A further condition is required to make futures trading attractive. The class of things dealt in should generally be liable to considerable fluctuations in price. These price variations help to create wide trading interest without which it will be difficult to bring about futures trading. It is the shifting demand coupled with the fact that supplies can never be estimated with exactness, that causes constant oscillations in price. These upward or downward price movements may ultimately assume large proportions. To encourage professional participation price must not only be sensitive and frequently changing but it must also move over a wide range. Moreover, the factors causing fluctuations must necessarily be natural; allowing for the fairplay of economic forces which would go to produce constant fluctuations. It is needless to say that cotton is capable of meeting this condition. In fact, it is notorious for its price variations.

Free Competition: Finally, a commodity must have a free and continuous dealing. This makes the market most competitive and renders the commodity liquid. A commodity must therefore be such as to render it possible to turn the same immediately into cash by way of effecting a sale at the will of the dealer and vice versa. It may be held for investment by way of purchase with the hope of turning it into cash when the price became favourable. This demands a large body of operators comprising of various sections, namely, producers, merchants, consumers and professional dealers or speculators. Commodities available for trading in futures are those which have sufficient volume to be reasonably free from speculative control. From another standpoint, it is essential that transactions be numerous; otherwise, opportunities for speculative profit will be too infrequent to attract a considerable body of professional dealers. In their absence, free competition will be hindered to a very large extent. They make for rapid turnover and enormous volume of business which are essential to the character of futures trading. Besides, an organised market must be keenly sensitive and most responsive to every change in trade or general opinion. Cotton fulfils this important pre-requisite to a remarkable degree.

These are the various conditions prescribed for the successful development of trading in futures. Cotton not only fulfils each and all of the conditions laid down, individually and severally but is also the premier commodity in which futures trading is extensively carried on.³

2. SALIENT FEATURES OF A FUTURES CONTRACT

After ascertaining that cotton meets all the requirements of futures trading and there are highly developed cotton futures mar-

³ Besides cotton, futures trading exists in the following commodities: grain, sugar, cotton seed, linseed, rape, oil-cake, rubber, jute, hides, leather, etc.

kets in various parts of the world, let us now examine the characteristics of a futures contract.

Rules of the Exchanges Prescribe the form of a Futures Contract: The first and foremost peculiarity is that specific provisions of a futures contract are mostly determined by rules and regulations of a cotton exchange. Its form as opposed to that of a spot contract is prescribed by the exchange authorities.⁴ The contract made is always subject to the bye-laws and rules governing futures trading. Parties have to follow this form and comply with the regulations. Moreover, there are numerous conditions which play an important part in trading operations. Each of these conditions has a definite reason for its inclusion in the form, and individually as well as collectively they are set forth with reference to the fundamental character of the futures contract. Hence, the form of a futures contract may be regarded as only incidental and supplementary to the main conditions laid down in the bye-laws or rules of the institution.

Mode of Effecting the Contract: Though rules and regulations of the exchange are implied in each contract of sale and purchase, the practice that is followed to effect actual bargain is, so to say, highly informal. The mode of effecting it is rather customary than official. Contracts are made orally at the 'ring'. Transactions on a futures market are effected so quickly and with such a speed that formality is rendered superficial. It may be thought for a moment that this informal mode is not binding. Contrary to this expectation it is both binding and official. The contract is said to be official because the parties follow all the rules. It is binding because the parties get the contract confirmed either at once or on the following day. While still merely oral it has thus the same standing, force, and effect as a formal contract.

Futures is a Basis Contract: Perhaps, the best explanation for this informal mode of effecting a futures contract lies in the fact that it is a basis contract. Because the grade named in a contract is known as a 'basic grade', the contract is called a basis contract, e.g. "Fine machine-ginned Jarilla" in Bombay or "White Middling Upland" in New York is the basic grade in the respective contracts. The commodity delivered may be either of the grade contracted for or of some other deliverable grades. Price is based subject to adjustments on this grade only. The basic grade selected must therefore be the most representative of all the grades in a year's crop. The futures contract being a basis contract thus gives choice or elasticity in the number of grades that may be tendered.

Range of Deliverable Grades: From what has been said above it is clear that in a futures contract provision is made for the possible delivery of a wide range of grades. Grades of better

⁴ For the Official Form of a futures contract refer to the Bye-laws or Rule of any exchange, say, the I.C.A. or the New York Cotton Exchange.

quality are deliverable at the price either of the basic grade or at premium and those slightly below the basic one are tenderable at a discount or concession. In making up the list of deliverable grades the range therefore must be made sufficiently broad to form a reasonable basis for the contract. The purposes of keeping many grades deliverable are: (1) to insure that the commodity delivered against futures will bear a definite relationship to the spot market and tend to maintain it throughout the year, and (2) to lessen the possibility of scarcity of deliverable supplies in any one season. This scarcity may have been caused by nature or by any man-made factor. To counteract this possibility such a provision is necessary; otherwise, the contract will be exposed to manipulation.

Question of Delivery: To facilitate the trader, it is provided that deliveries will take place only between specified dates of the period named in the contract. For instance, in Bombay, delivery will have to be effected during the months of January, March, May, July and September in the case of Jarilla contract. Further, days of delivery are also specified and delivery cannot be made on any other day which is not mentioned in the rules. Since a definite delivery period is provided for, the operator who does not wish to fulfil his contract in this way may accomplish it by selling out or buying back an equal amount.⁵ The question of actual delivery is therefore only a matter of detail.

Sellers' Options: The seller is given the option of making delivery on any day, of course, within the specified dates and period. Another option allowed to the seller is with regard to deliverable grades. It is he who selects the grade or grades to be delivered. The futures contract gives these two important options to the seller who, as a result, gets a considerable latitude in the fulfilment of his obligations. The reason for this appears to be that cotton in transit may be delayed by unforeseen circumstances. Both these options are meant to militate against a seller being penalised by reason of shortage in the deliverable stocks. Finally, they are intended to insure against manipulation of a futures contract.

Definite Size of the Contract: We have still to note a few other salient provisions. One of them refers to the size of the contract. It is kept definite and in round figures primarily with a view to facilitate rapid turnover and to some extent to meet the needs of the trade. For instance, the Bombay contract prescribes a unit of '50 bales of 400 lbs. or 25 candies of 784 lbs. each', while in New York it is '50,000 lbs. in about 100 square bales'. This size has to be maintained but the contract can be entered into any multiple of the prescribed unit.

Settlement Terms: Another important characteristic is that a

⁵ This process is known as 'offset' and is discussed in the chapter on clearing.

futures contract is subjected to settlement terms which may be daily or periodical. This has been provided for in order to minimize the risk incurred by contracting parties. In certain cases the contract has to be backed by adequate deposits known as 'margin money'. Both these provisions are intended to protect and safeguard the operators against each other. Consequently highly efficient clearing machinery and methods form a part and parcel of the mechanism of futures markets.

Fixed Place and Hours of Trading: Lastly, a futures contract must be effected at a place reserved for that purpose and during the hours prescribed. In other words, a futures contract must have been entered around the ring in an exchange and during the business hours officially announced.⁶

It will thus be noticed that the price and the period of delivery are the only terms left to the contracting parties to agree upon. This gives the operators a contract through which they can buy or sell cotton, with the least possibility of misunderstanding and confusion. The general characteristics reviewed above bring us to the conclusion that though the futures contract is highly technical in character, its salient features render it explicitly definite in its provision and unvarying in obligations. Its form is also made so clear and simple that a futures contract requires no immediate attention to either details or technicalities.

3. DISTINCTION BETWEEN 'SPOTS' AND 'FUTURES'

For most of the commodities there exists a 'spot' or ready contract in which the commodity is bought and sold by private transactions involving specific lots and grades sold for a definite delivery date, and also a futures contract in which the transactions are effected on an organised market through the buying and selling of basis or standard contracts which call for the delivery of the commodity at some future date. Since trading in cotton is made of these two broad classes of transactions, it is necessary to compare and contrast futures with spot contracts.

'Spots' and 'Futures' Compared: Spot or ready cotton contract implies actual cotton of all kinds, grades and qualities that may be sold to those who need a particular variety and a specific grade to suit their requirements. A futures contract as contrasted to spot is a contract in a set form for sale or purchase of a stipulated amount of a basic grade at a fixed price, on a future date, on a futures exchange.⁷ The first point of difference between these two contracts that strikes us is that futures trading is done on the basis of a contract grade without reference either to any specific lots

⁶ In Bombay, however, such a contract is effected anywhere at any time.

⁷ cf. A. H. Gossie, *Cotton goes to Market*. "Spot may be defined as any specified bales of cotton stored anywhere in the world as opposed to 'futures' which may be defined as the unspecified bales covered by a purchase or sale for future delivery on a futures exchange." p. 215

or samples. Another distinctive feature lies in its size. The size of a spot contract is not definitely prescribed as is the case with futures. Tender can only be effected during the specified period and days in the case of futures, whereas, in spot, the period of time used for delivery varies according to the terms of contract entered into between the parties. Moreover, the seller of futures is given the option in matters of selecting both grades and the day of tendering. A further point of difference lies in the use made of the two contracts. It clearly distinguishes the nature and character of 'spot' and 'futures'. Again, the futures contract is executed openly in the exchange ring during specified hours, while the spot contract is negotiated privately and at any place during any time—day or night. In contrast with the spot contract the methods of bidding and offering, and rules prescribing among other things even the unit of price quotations, further render the futures contract a highly concentrated and systematised one. Being closely and definitely regulated a futures contract is a precise contract and a slight breach of the terms makes the operator liable to the other party.

Main Points of Distinction: (a) **Test of Volume:** There are two tests to distinguish these two contracts from each other. One is the volume of business put through. While the spot business varies with the seasonal supply and the demand during the year, it can never compete with a huge turnover in futures. The volume of dealings in futures as opposed to that of spots is enormous.^a

(b) **Test of Delivery:** The other test lies in the actual delivery effected against spots and futures contracts. This point serves to emphasize the difference in their uses. A man who buys futures does not as a rule want the cotton itself. A man who sells futures does not want to provide the cotton. More generally in practice each man's turn is served by having concluded a contract in terms

^a This will be better realised from the following table which gives the monthly turnover for ten years:

Table* showing volume of trading in cotton futures at all American contract markets (New York, New Orleans, Chicago) by month, in millions of bales

MONTHS	28 29	29 30	30 31	31-32	32-33	33-34	34 35	35 36	36 37	37 38	38 39	
August	..	14.6	9.0	7.2	6.0	9.6	7.3	5.5	3.6	3.0	4.6	2.8
September	...	14.1	11.4	8.0	7.7	10.2	8.7	5.4	3.4	5.6	5.8	5.0
October	...	14.5	11.8	7.5	8.8	5.1	6.1	4.0	4.7	5.1	5.0	3.9
November	...	13.3	11.4	6.7	8.3	6.2	6.6	4.5	3.8	4.4	3.6	3.5
December	...	9.5	6.0	6.5	4.4	3.5	2.6	2.7	3.2	5.2	3.6	2.8
January	...	9.2	6.2	3.7	3.5	2.4	6.9	2.8	4.1	3.6	2.5	2.5
February	...	7.5	10.7	5.1	5.3	4.0	8.8	3.1	2.2	2.7	4.2	2.3
March	...	12.5	9.6	4.3	4.5	3.1	4.0	5.5	1.9	7.9	3.5	
April	...	12.0	7.7	6.6	5.2	7.5	5.7	3.9	2.1	6.0	3.1	
May	...	9.9	5.8	5.7	3.6	10.9	3.6	3.8	1.9	2.7	3.2	
June	...	8.6	7.4	7.7	4.5	10.8	5.8	3.2	4.0	4.2	4.7	
July	...	8.7	4.5	5.5	3.2	14.3	6.3	2.5	4.7	4.0	3.5	
Total Seasonal:		134.4	101.7	74.5	65.0	77.6	72.4	46.9	39.6	54.4	47.3	

*Source: Commodity Year 1939 Book, p. 219.

of which he gets protection or guarantee which serves as a basis for some other operation of which this is only a part. A futures contract is used rather as a weapon whereby the user may protect himself against losses that may be occasioned through sudden and unforeseen changes in prices, than as a means to merchandise the goods. As futures is a basis contract, the buyer is not sure of what he will receive. He, therefore, most probably sells out the contract before maturity. Moreover, futures if fulfilled by delivery may neither meet the specific requirements of a consumer nor of a seller who may not receive the price which his cotton will ordinarily command in the spot market. Thus it renders inadvisable both for the buyer to take delivery and for the seller to make delivery on futures. In fact, a common practice followed on the exchange is that the contract passes through many hands and later on, for the most part, the transaction closes entirely by way of buying back by the parties originally selling. This can be seen from the following table:

Table showing Volume of Deliveries on futures contracts on the Bombay and New York Cotton Exchanges.

Bombay (year ending 31st August)				New York (year ending 31st July)		
Season	Delivered	Approximate Indian crop	Per cent deliveries to total crop	Delivered	Total U. S. Crop	Per cent deliveries to total crop
	Tons (000)	Bales (000)		Tons (000)	Bales (000)	
1930-31	170.3	6,750	2.52	598.0	13,932	4.29
1931-32	85.0	4,678	1.81	216.5	17,096	1.26
1932-33	128.9	5,979	2.15	275.2	13,002	2.11
1933-34	125.9	6,492	1.93	253.2	13,047	1.94
1934-35	203.0	6,477	3.10	154.8	9,637	1.60
1935-36	306.4	6,837	4.77	41.7	10,638	.39
1936-37	146.1	7,348	1.98	170.2	12,399	1.37
1937-38	160.7	5,544	2.89	237.0	18,945	1.25
1938-39	74.7	5,120	1.45	126.2	11,623	1.08
1939-40	121.8	4,942	2.46	122.5	11,481	1.06

The above table shows that the actual amount of cotton delivered on futures is quite negligible when compared with the figures of the crop produced. This is a natural consequence of the facility offered by the futures, whereby a buyer who does not wish to accept delivery may sell an equal amount of the same contract long before the delivery period and then offset one transaction against the other. The proportion of cotton actually tendered and accepted is, therefore, in the highest degree quite insignificant compared with the contracts entered into in futures.

In the end it may be observed that while the character, conditions, use, place and volume of futures trading are distinct from those of spot trading it should not be thought for a while that they

have no connection altogether with each other. On the contrary, spots and futures are closely related through the right granted to those who trade in futures to convert their contracts into spot transactions. At the back of the futures is the commodity itself. The seller may insist on making delivery and the buyer may insist on receiving delivery thus turning their futures into spot contracts.

4. *MODUS OPERANDI* OF FUTURES

The above mentioned differences may strike us as being important and in a way they are. However, the arch-point of difference between the 'futures' and 'spots' lies in the purpose and character of the two contracts. It is therefore appropriate to examine the purpose and legal nature of a futures contract.

Purpose of Futures: A spot contract is usually employed to merchandise the commodity, but a futures contract is used (1) as a guide in arriving at spot cotton prices and (2) as a hedge, that is to say, to protect those engaged in the industry, mainly merchants, distributors and manufacturers against violent fluctuations in price. They can insure or protect themselves against appreciation or depreciation by buying or selling cotton for future delivery to the extent of their commitments. The futures contract is used for insurance purposes. The insurance is not obtained in the form of a policy but in a double transaction known as a 'hedge'. Moreover, the futures contract was designed for the purpose of eliminating the risk of price changes faced by the merchants distributing cotton and cotton goods. After many years of experimenting with spot contracts, progress was made towards the perfection of the futures contract. Those who deal in ready business or spots have also found a way to use futures as a price-making instrument. They base their spot business on the quotations of the futures contract. It will thus be appreciated that the main purpose of futures is to substantially reduce the risk to which a dealer is exposed in the ordinary course of the business; and speculation is a by-product."

Legality of the Futures Contract: The law distinguishes between a contract to sell and a contract of sale. The former is simply an agreement to sell in which the title does not pass until the various conditions to the contract are fulfilled. Such agreements are known as "executory contracts." As against this in a contract of sale, the general property rights pass to the buyer at once and it is known as "executed contract". From this legal point of view it will be seen that a futures contract is an executory contract while a spot contract is of the nature of executed contract. In all cases, spot contracts, thus, differ from futures contracts on this point of law. A futures contracts should, therefore, be thought of as a 'right' to the cotton rather than the cotton itself. In dealing in futures the trader is dealing not in the actual commodity but in the

⁹ Refer to Chapters on 'Hedging' and 'Speculation'.

'claim' on or contracts for the commodity. Such a contract is equally legal and binding on the parties. Everyone in the cotton market knows that the buyer of a futures contract is liable to have cotton tendered to him, if he lets it run to the due date, and the seller will be called upon to deliver the cotton by the end of the delivery period, if he has not previously bought in a similar contract. In spite of this it is believed by some that a futures contract is meant for gambling, pure and simple, because, delivery can be avoided. We have seen that the purpose of a futures contract is that of insurance which renders it futile to be fulfilled by actual delivery and hence, it is settled by offset or substitution. The fact, that a large proportion of transactions in futures are settled by these methods, has given rise to cases in which the legality of the operation has been brought into question. Those who have attempted to attack its legality have done so by attempted analogy. When contracts are settled in the above manner they involve only the payment of price differences. This fact affords some clue to the opponents who maintain that futures belong to the realm of gambling and wagering contracts. It seems that these people forget the fundamental point at issue that the parties to the contract are held strictly to its terms under the law; that is, at maturity of the contract the seller must deliver and the buyer must receive the cotton called for by the contract unless otherwise settled before the due date and whether delivery takes place or not is beside the point. Moreover, a man may lawfully sell goods or stocks for future delivery even though he has none in his possession, if he really intends and agrees to deliver them at the appointed time. Such a transaction constitutes a valid contract and is enforceable at law. It may therefore be observed that there is nothing inherently illegal in futures.

Bank Credit Analogy: A fairly good analogy is to be found in the relationship which our commercial credit structure bears to bank reserves of gold and legal tender. The cash payments so largely offset one another that only a small percentage of cheques involves a transfer of cash from one bank to another by way of difference. The soundness of the system in both the cases depends on any individual or bank being able to get or make delivery on demand. So long as this can be done a futures contract is no more fictitious than the system of bank reserves or credit. Thus the mere fact that one makes a contract opposite to that into which he has previously entered does not necessarily mean that he is dealing in differences, even if on the face of it, it may appear that these are contracts for dealing in differences only. The net effect is to be gathered from a legal standpoint and 'intent to deliver' is the real test of a gambling contract. It has been decided by the courts a number of times that the offsetting of contracts does not of itself prove lack of such intent. An operator, however, may buy having in his mind no intent of taking delivery or he may sell with no intention of making delivery. This is a point difficult

to judge. It is, therefore, not his unexpressed mental attitude which determines legality or illegality. What decides this point of law is the fact that he may be compelled to deliver if he does not offset his contract as a seller or he may be compelled to receive cotton as a buyer.

Justice Holmes on Futures: The position of the courts in this connection was best illustrated in 1905 by the decision of the United States Supreme Courts in the well-known case of the Chicago Board of Trade vs. The Christie Grain and Stock Company where Justice Holmes observed: "The contracts made in the pits are contracts between the members. We must suppose that from the beginning as now, if a member had a contract with another member to buy a certain amount of wheat at a certain time and another to sell the same amount at the same time, it would be deemed unnecessary to exchange warehouse receipts. We must suppose that then as now, a settlement would be made by the payment of differences. This naturally would take place no less that the contracts were made in good faith for actual delivery, since the result of actual delivery would be to leave parties just where they were. *Thus, set off has all the effects of delivery . . .* the fact that contracts are satisfied in this way by set-off and the payment of differences, detracts in no degree from the good faith of the parties and if the parties know when they make such contracts that they are very likely to have a chance to satisfy them in that way and intend to make use of it, that fact is perfectly consistent with a serious business purpose and an intent that contract shall mean what it says."

Similarly, in numerous cases the courts have held that as long as delivery is one alternative in fulfilling a futures contract, it is adequate enough for legal purposes. Being simply a convenient and inexpensive way of accomplishing what would otherwise be a very burdensome and useless process, offsetting constitutes delivery in a symbolic form. Because a futures contract provides for actual delivery the law puts the stamp of legality on it. But where this right is removed and delivery is not contemplated it is apt to be inferred that the parties to such agreements are merely betting on price differences.¹⁰

¹⁰ Such cases are those of Ank and Farak business, dealings in Kutch American, etc. It may here be observed that this sort of gambling has no relation with the cotton trade as such. It comes under the Prevention of Gambling Act, 1935.

CHAPTER IV

ORGANISATION OF FUTURES MARKETS

IT is now well over 80 years since cotton futures markets first came into existence and began to function as the media for transferring and offsetting price risks; and today the cotton trade of the world is more largely centred around them than ever before. The evolution of these markets has already been traced in the second chapter, and we shall now discuss their organisations in general. This will be illustrated by a description of the organisation of a few leading markets in the following chapter.

1. OBJECTS FOR WHICH THE FUTURES MARKET IS ESTABLISHED

One of the essentials of trading in futures is that it must be established in a place where buyers and sellers can meet one another. A market is a place where a fine balance can be struck between the available supply of and demand for a particular product at a particular time, with the result that a uniform price may be established within the market area. Where the production and consumption are world-wide as in the case of cotton this area usually represents the whole world.

Spot and Futures Markets: This is more true of a futures market than that of a spot market. Considerable time elapses between the growing, marketing and manufacturing of cotton. For this reason it is important that during this interval there should be some methods and machinery through which different interests may, if they want, avail of the much-needed protection against price hazards. This is accomplished by a futures contract which in turn necessitates the institution commonly referred to as a futures market as opposed to a spot market for the same commodity. Much confusion, however, centres around these two component parts. An exchange is a trading place and hence, is itself a market. A futures market is formed by an association and transactions are made only through members, whereas a spot market is generally a free market. Codified rules easily ascertainable by all interested in the commodity, in contrast with uncertain trade customs prevailing in different spot centres, go to account for this difference. Moreover, markets where futures dealings are of considerable magnitude exhibit certain features unknown to spot markets. These characteristics may be found in frequent transactions and rapid turnover resulting in continuous price quotations which may be more or less influenced and at times, brought about by pure and simple technical conditions. Another important peculiarity is that a futures market is composed of professional traders maintaining an elaborate establish-

ment for the prompt execution of orders. The elaborate equipment is also employed for the collection and dissemination of statistics and news interesting to the trade. Thus, in contrast to the spot trading, open and continuous futures trading during certain hours each business day, with sales and information broadcast throughout the world, keeps producers and dealers in close touch with changing prices.

Number and Location: Widespread transactions take place in the form of dealings in futures upon the great organised produce markets. There are several such markets located in important cities throughout the world where communication and transport facilities are adequate and funds for the financing of transactions can easily be secured. Usually commodity markets flourish in cities through which a substantial portion of goods passes each year. For instance, Bombay handles more than a million bales of cotton each year and hence, it is regarded as an important world market for cotton. Cotton futures markets located at Bombay, New York and Liverpool are of major importance. In addition to these, there are important futures markets in Karachi, New Orleans, Alexandria, Havre, Bremen, Osaka, Chicago, and Ahmedabad. The futures markets at Surat, Shanghai, Sao Paulo and Indore are of minor importance. There is also an important spot cotton market in most of these cities. However, futures trading is concentrated in a few leading markets such as Bombay, New York and Liverpool. Approximately two-thirds of the volume is put through them. Their aggregate business when measured by monetary value would surpass many a time the total value of the remaining futures markets¹. The importance of these highly centralised markets may be attributed to the magnitude of the total turnover made on their floors. In fact, they are most sensitive and continuous. Traders would naturally resort to them more often than to any other market, because, there the operators get a sort of assurance that transactions will be effected at current prices.

Exchanges and Trade Associations: The present economic order makes it imperative to have an exchange established with the distinct objects of serving the needs of different trades in different commodities. We have futures exchanges for a large number of commodities and a cotton exchange may be said to head the list. A great deal is said in favour of such exchanges, but, on the other hand, they are equally subjected to criticism. A considerable part of the criticism comes, however, from the people who either do not understand their nature or fail to realise the benefits. The identity of these exchanges is sometimes confused with that of the monopolistic associations, such as, big corporations or mergers which are formed with the avowed purpose of regulating either

¹ In the absence of any statistical data available for all the cotton futures markets of the world, it has not been possible to give any figures in support of this common belief expressed by almost all the leading concerns to our query.

prices or production and at times, both. The futures exchanges for commodities are quite distinct in their character and altogether different in nature. They are established by the traders who agree to create a market and protect it for their individual as well as mutual benefit. The point may further be emphasised by the fact that the exchanges themselves neither deal in the commodity nor make the price of it. For instance, the cotton exchange never buys nor sells cotton. As an institution, it has no profit or loss arising from the business activities or any market position. It only furnishes conveniences to facilitate futures trading. Moreover, the exchange is maintained, as we shall see later on, largely through dues and fees from its members. Again, some one might compare these exchanges with institutions such as Merchants' Chambers or Chambers of Commerce which are said to be more or less similar in this particular aspect. But this can be dismissed by pointedly bringing home the difference between the respective characters of these organisations. The cotton exchange is homogeneous as compared to the Chambers of Commerce. A membership of the latter is open to all irrespective of particular trade or interest while a membership of the former consists only of those interests who are directly or indirectly connected with cotton trade or industry. Criticism is often made against the exchanges that the members manipulate operations and aim at suppressing competition.² How far this allegation is borne out, we shall examine in its proper place, but for the present these critics may be referred to the National Industrial Conference Board, Inc., New York, who have stated that futures exchanges are organised chiefly to promote trade, "by establishing business relationship conducive to intelligent and orderly competition".³

Their Purposes: Exchanges are formed with the avowed purpose stated in their Memorandum of Association or in the Charter. The aims and objects of the East India Cotton Association might be reproduced here as an example:—

The objects for which the Association⁴ is established are:

1. To provide and maintain suitable buildings or rooms for a Cotton Exchange in the City of Bombay and elsewhere in India.
2. To provide forms of contracts compulsory or permissive and regulate the making, carrying out and enforcement or cancellation of contracts.
3. To adjust by arbitration or otherwise controversies between persons engaged in the cotton trade.
4. To establish just and equitable principles in the said trade.

² Personal interviews.

³ Trade Associations, Their Economic Significance and Legal Status: 1925, p. 97.

⁴ Ref. to Memorandum of Association of the E.I.C.A., pp. 1 to 6. Only important objects are reproduced here.

5. To fix or adopt standards or classification of cotton.

6. To acquire, preserve and disseminate useful information connected with the cotton interest throughout all markets.

7. To control, promote and regulate the Cotton Trade in the Presidency of Bombay and elsewhere in India, improve its stability and augment the facilities with which it may be conducted.

8. To establish and maintain a Clearing House for the purpose of dealing with cotton transactions.

9. To prescribe the principle of framing of contracts with a view to eliminate the temptation and possibility of speculative transaction.

10. To make from time to time Bye-laws for the control and regulation of membership of the Association and of cotton dealings in the Presidency of Bombay whether under the Bombay Act XIV of 1922 or any statutory modification thereof or otherwise.

11. To establish, take over, control, manage, or regulate the Cotton Market in Bombay or the Cotton Market or Markets in any part of India.

12. To establish and carry on a Bank to undertake banking business.

2. PHYSICAL EQUIPMENT

The physical equipment of an exchange refers to the trading ring, offices, wire connections, and various other facilities provided by the futures market.

Trading Ring: In all the futures exchanges a large open space is provided where the operators meet. It is called a trading floor. It is the most important physical feature of the market. The floor is located in a building mostly owned by the association. A central and most conspicuous place in the floor is the 'ring'. This ring is commonly known as a trading ring. It occupies a prominent position because it is in the ring that all futures business is supposed to be effected. All the operators get together in the ring where they freely exchange their views by way of offering or bidding. The ring is designed to bring about the concentration of demand for and supply of cotton. Since the buyers and sellers are scattered all over the world the ring can be described as the focal point of their views. There is an elevated platform known as the 'rostrum' within the area of the ring. It is intended to serve the operators across the ring. Sometimes, the trader is accompanied by a reporter who stands by him to note the transactions.

Wire Connections: Besides the ring, spaces are provided for

sets of telephone booths. Private wires are connected from telephone booths on the floor to the offices of operators and member firms. It is designed to transmit orders to the floor traders from the offices. In the same way, orders when executed are confirmed. Apart from the direct wires to the offices, there are also other wires connecting the public telephone system on the floor. In some big markets there are batteries of telegraph instruments through which large telegraph companies receive and deliver telegrams from clients to the members ordering purchases or sales of futures. There is, similarly, a telegraphic reporter's equipment through which continuous quotations are sent out. In this way, wire connections afford facilities which make the ring easily accessible to all the prospective traders. Orders are telephoned to the floor where an attendant receives and passes them over to the ring trader who in turn executes them. These connections enable the operators to make instantaneous report of the execution of orders to their clients.

Offices: On the trading floor only cabins are located but around the floor and in the building of the exchange a number of offices of the members are situated. There are also executive offices of the exchange and committee rooms in the vicinity of the trading floor. A member's office contains sitting and wire accommodations both for the staff and for the reception of customers. Apart from these facilities, there is a quotation board on which are recorded current quotations of cotton and other markets. Quotations received from abroad are also noted on the board. It is this posting of quotations together with the telephone connections that supplies much of the glamour associated with such offices.

Other Facilities: But the physical equipment means more than merely the trading ring, wire connections and members' offices. On the floor and above the ring, high on the walls, there are black boards with facilities for recording the prices on current transactions and posting the statistical data, weather reports, crop conditions, etc. There is a visitor's gallery too.

3. STATUS OF FUTURES MARKETS

In external features and many of its methods of operation, the organisation of the cotton futures market is very similar to that of the securities markets.

Nature of Organisation: Exchanges are organised corporations incorporated under the laws of the State or country in which they are located. Cotton futures markets are created directly or indirectly by law and in some instances very closely supervised. The exchange can act as a business entity, hold and transfer property, use a common seal and make such rules and regulations not contrary to the law for the due performance of its duties. It can levy fees and recover dues, receive money on deposits and advance money from time to time. It can also raise loans, and enter into

any arrangement with the Government, Railway, Municipality, etc., and to carry it out, it can give rights, licences, privileges and concessions. Moreover, limited liability attaches to its membership as in the case of an ordinary joint stock concern.

Character of Futures Markets: The organisation of commodity exchanges is of two kinds, general and special. A general exchange is one on which several commodities are dealt in. On the other hand, a special exchange is one on which one article alone is sold. On exchanges where more than one commodity is traded in, a separate ring is provided for each commodity. For instance, on the Chicago Board of Trade there are separate rings for wheat, corn, oats and cotton. Similarly, on the floor of the New York Cotton Exchange, trading is carried on both in cotton and wool tops. In New Orleans, trading takes place in cotton and cotton oil-seeds. Other similar instances are furnished by the Osaka Samping, Alexandria and Havre exchanges. Hence, the organisation of all these markets come under the first category. The cotton markets in India and those of Liverpool and Bremen fall under the second category, because the commodity dealt in is only cotton.

Membership of Exchanges: A glance at the list of members of a cotton exchange will show that it is representative of all sections of the trade both at home and abroad. Manufacturers, dealers, brokers and merchants in India, England, Europe, America and Japan hold memberships on any leading market. Some of them will be found even on the list of all the three leading markets, viz., Bombay, New York and Liverpool. Admission to membership is carefully supervised. Close scrutiny is made of each applicant's business record and commercial standing. Qualifications required of a member are three in the main: (1) lawful age, (2) good character and (3) sound financial standing. The application of a prospective member must be in writing and in the form prescribed by the management duly signed by the candidate along with a proposer and a seconder who must be members. If he is a member of a partnership concern his firm is registered by the exchange and will have its business transacted at the commission rates prevailing for members. These registered firms, like the members, are subject to regulation by the authorities for any unbusinesslike conduct.

Memberships are of various types, viz., (a) Full, (b) Associate and (c) Special. Ordinarily, a member has to pay a deposit in the case of Bombay, in Liverpool a share issued by the Association should be subscribed and in New York a seat must be bought. He has also to pay all annual fees, dues, etc., to the exchange. These dues are collected not to make profit but to meet the cost of maintaining the exchange. The deposit or a share or a seat is a member's interest in the exchange, similar to a share in a concern evidenced by a share certificate. Membership of the more important exchanges is a valuable privilege. It is often purchased at a

high price because of the fact that the membership is limited. Since it gives the privilege of doing business in the ring it commands at all times a certain market value. Further, it creates confidence among the members while dealing freely on the floor. Each operator thus has confidence that the opposite party is financially sound. In the event of financial troubles a member creditor has full recourse to the deposits, proceeds of a share or a seat belonging to the party involved. Of course, priority is given to the exchange for membership dues, fees, etc. In this way, the status of the futures market and of the members, as outlined above, is well-established. It greatly aids in rendering the futures contract inviolable.

4. PERSONNEL OF THE FUTURES MARKET

Since the membership of the futures market is made up of persons scattered throughout the world, less than half of them actively participate in the business on the floor.⁵ Again, all members do not transact the same type of business. Some concerns do brokerage business only. Others confine their activities to orders originating in the conduct of their own business. Many houses handle business both for themselves and for their clients. There are also speculators and scalpers on the market.

Brokers: Members when acting as agents on behalf of others are termed brokers, and the remuneration received by them is called brokerage. By far the greater part of trading in the ring is done by brokers. The majority of the members are brokers in any one market and a large part of their trading consists in the execution of orders from their clients. The position of a broker is that of a principal to the opposite contracting member party, while his relationship with a non-member is that of an agent. As agent, he accounts to his principal for profits or losses, incidental costs by way of commissions, etc. He protects himself against financial responsibility on the part of clients by requiring suitable deposits from them. The broker offers his services to non-members and remains satisfied with whatever remuneration is received in the form of brokerage. This class is supposed not to deal on its own account. Otherwise, they are termed as 'floor brokers'.

Commission Agents: In addition to this type of brokers, there is another class of people who stand more or less on the same footing and are called commission agents. They also mostly rely on the commission and maintain the same relationship as that of brokers with non-members and members. The only difference is that they usually carry on both the parts of the marketing business, viz., spot and futures; whereas, brokers may or may not have interest in spot business. Nevertheless, both are members of an exchange, carry financial responsibilities and put in quite a consi-

⁵ Some people have told us that even one-third is not actively participating in the business on the floor of the exchange.

derable amount of business on behalf of customers. Both maintain large offices and suitable places of business to receive clients. Some of the larger firms run a branch office too. Some of them run departments of statistics and collect market news and other relevant information affecting price. They spend large amounts in preparing and circulating useful market data among the customers. For all such expenses, their only source of income is brokerage or commission earned. Hence, their turnover should be large enough to cover these expenses and leave a profit.

Floor Brokers: Every member has a right to transact business at the ring. But in most cases, the members do not attend the ring,⁶ and the business is carried on by a class of people who are termed 'floor brokers.'⁷ This class of brokers is referred to as brokers' brokers. They may or may not maintain big establishments and have no customer's risk. Their responsibility to the firm on whose behalf they carry on trade is no doubt considerable and when the time comes they 'give up' the name of the principal and thus free themselves from any risk. Brokerage claimed by the floor brokers is therefore a comparatively smaller amount than that received by principal brokers. These people generally 'square up' the business at the end of the day. Though business is done in large proportions on either the buying or selling side they do not carry any transaction forward. What is taken into consideration is the total turnover and the net position of the day. Sometimes, it so happens that they do their own business and at the same time work as agents to any member. Thus, they at times act in dual capacities: (1) as floor brokers and (2) as scalpers. The skill of this class of people lies in their ability to correctly appreciate and judge the circumstances which may be temporary in nature but nevertheless effective on the price level.

Scalpers: A scalper may or may not be a member of the exchange. He is a trader who constantly watches price movements and is always ready to buy or sell even at a slight variation. Scalping is undertaken by some enterprising people who enter into transactions on their own account and close the business before the end of the session. It helps in the smooth functioning and broadening of the market. A scalper's plan of operation is to make a turnover on the whole and he does not care whether a particular transaction brings him profit or loss. What he counts upon is the average of the day and remains satisfied with a small profit. If six out of ten units are successful he accounts himself fortunate. A scalper's plan is generally to buy at one minute and sell at the other if he finds a chance of making a profit say of annas four in the case of India or .1 or .2 per unit of contract in the case of Liverpool or New York. He turns immediately with the market

6 Personal interviews.

7 In India, these people are referred to as 'jobbers' or 'sub-brokers'.

8 In India, 'Scalpers' are called "Taravanivalas".

on both sides at a very small margin. He has no opinion about the market nor need he have any for the successful accomplishment of his job. For success he has to depend more on natural trading instinct than general knowledge, because he has to get his remuneration out of small and immediate fluctuations. He has to be a bull at one moment and a bear at the next and thus take his turn, known as a 'jobber's turn' in a Stock market. He has also to be in and out of the market continually. He is supposed to be on the alert so that his transactions may be closed should the market move against him. Scalpers act as middlemen between buyers and sellers. It is the scalper who indiscriminately becomes a ready buyer to a seller and vice-versa at any moment of the trading day. He is therefore considered a valuable part of the marketing machinery. If there was no scalping one would not be able to buy or sell large quantities of future. One would have rather to go and find the buyer or seller as the case may be. The ease with which a deal is put through is the real test to justify the existence of this class of dealers in the market.

There is another type of scalpers who are not seen in the ring but may be in a member's office or elsewhere. They carry on scalping business on the basis of quotations received. By the facilities provided in a member's office by telephone, wire connections, etc., they are afforded some sort of ease in scalping in and out of the market. The limitation of their business lies in the fact that they have not got the advantage of being present on the floor and trading personally in the ring. As a result, they are handicapped in taking full advantage of a minute to minute change in price. In addition, they have to pay commissions to members and thus sacrifice a part of their profits. A point of difference to be noted in connection with these two types of scalpers is that the latter often carries his business forward and he may not, as a rule, even out his market position even at the end of the trading session, as is the case with the former.

Professional Dealers: There is still another class of operators styled as professional dealers or 'Speculators'. In contrast to scalpers the members of this class base their business on general and broad factors calculated to affect price in the long run. They do not depend upon the minor fluctuations but on the general outlook and act on their own judgment. They neither confine their position to any particular day's trading nor do they base their idea on a short view. They carry their business forward over periods of several days, weeks or months. For the sake of clarity this class may safely be divided into two divisions—large scale and medium scale speculators. A large scale speculator usually makes speculation his sole profession while a medium scale speculator does not; for the reason that the trade interest of the latter lies in something else than speculation alone. The latter depends upon factors affecting the market for the time being, while the former takes

into consideration factors affecting the price movements as a whole. Again, length of time may vary from a day to a comparatively short period in the case of the latter, while in the former case, it varies to an indefinite period. Among speculators, there are both members and non-members. The advantage of being a member speculator over the non-member is obvious. The member speculator gets full knowledge pertaining to factors affecting the price of cotton, while the non-member may not have it. The non-member is therefore guided by a member-broker or commission agent upon whom he has to rely for every relevant piece of news and information affecting the market. Assuming that both get equal information, success depends not on the news only but also upon the financial capacity, personal power, and will to do the business.

Hedgers: Mention should also be made of a class known as 'Hedgers'. Their main object is not to make money out of price changes. Contrary to the objects of speculators, scalpers, floor brokers, etc., their aim is to protect themselves against price hazards in the course of their normal merchandising business. These are the people whose main business lies in other phases of marketing rather than in futures. They make use of futures to avoid probable losses,⁹ while speculators as a class employ futures to make money. In other words, one intends to shift the risk whereas the other readily shoulders it. Hence, an analogy may be drawn with the business of insurance that a group of speculators constitute the insurers and that of hedgers the insured. With this class there is no question of being a member or a non-member as in the case of speculators. All hedgers generally stand on an equal footing. What is important is not the knowledge of intricacies but the volume of trading a hedger needs to put through. For this purpose, most of the concerns forming the class of hedgers hold a membership of the exchange so that they may secure its advantages particularly in matters of commissions.

Should they act as Traders?: The question of the exact capacity in which a member puts through a transaction is one of great importance, both from the point of view of brokerage or commission and from the point of view of moral liability on the contracts. With the exception of hedgers, if we take all the above named types together as a class of operators on a futures market, they at times, not only overlap the functions of one another, but also tend to be floor traders. They frequently do business on their own account as well as on account of their principals. A serious point arises when a broker or a commission agent or a floor broker, over and above executing orders received from clients transacts business either on account of a firm or individually.

⁹ The amount of loss likely to result owing to adverse price variations will generally be offset by a corresponding gain in an opposite transaction either in futures or Spot. See also chapters on 'Hedging'.

When one gets a big order either to buy or sell, he is naturally tempted to take advantage of it. If he thinks that the order is likely to affect the movement of prices appreciably, he may partly precede his clients' orders, by buying or selling as the case may be, first on his own account and then transfer the same to the client with probable benefit to himself. Hence, their business morality is questioned. This state of affairs heavily tells upon the broker's duty as an agent to his principal. A broker is supposed to exercise due care and take every precaution to protect the interests of his principal. It renders the brokers' function quite distinct from that of a floor trader. He should not violate his function as an agent to the client. The interests of the clients who may be producers, merchants, shippers, or millowners would be better served if the broker's and a floor trader's job were strictly separated by the exchange. At times, he acts for himself on the strength of the orders in his pocket and grabs the difference. This is apt to make him less fair-minded in his treatment of his client's business. Another important objection that can be raised in this connection is that he becomes so much engrossed in his own business, that he is likely to find little time to remember the actual position and requirements of his clients. Moreover, it is not possible for him to act as a good and honest agent, if he undertakes a job of a floor trader simply because his own prejudice will not allow him to take a detached view about the market. After all, floor traders and brokers are men of different categories. One is a helper to the trade, i.e. he meets buyers and sellers in the market while the other becomes the principal, i.e. he buys or sells himself. Brokers, therefore, should trade through floor traders and not on their own account. There is thus room for regulating their individual functions and prohibiting them from acting as principals and agents at one and the same time, in one and the same transaction. The authorities of some of the exchanges have attempted to bring about the division of function by prohibiting the members to act in the dual capacity of an agent and a principal. But this is not enough. They should try to regulate a broker's business by enforcing upon him the rule that a broker should not buy or sell on his own account. How far this is practicable is difficult to say but a high standard of business morality is likely to improve matters.

5. ADMINISTRATION OF FUTURES MARKETS.

The general organisation and operation of different cotton futures markets are more or less the same in principle and differ only in detail.

The Board: The central administration of a futures market is vested in the Board of Directors or Managers. The management of business and control of the exchange lie with the Board, who exercises all such powers, authorities, duties and discretion expressly conferred or imposed upon them and does all such acts and

things that may be done by the exchange. An organised market is governed by a president, a vice president and a group of members called directors or managers. The directors are elected annually.¹⁰ The Board elects one of its members to be a president and another to be a vice-president. It adopts rules and regulations which are designed to carry out the objects of the exchange. It is the Board who is the ultimate authority of the exchange having final jurisdiction in all questions except in matters deliberately reserved for reference to and voting upon by the general body of members. The Board governs the organisation largely through various standing committees.

Officials: The Board appoints salaried officials of the exchange to carry out the daily routine of the executive work. These officials are invested with such powers as the Board may think expedient. Their duties are also determined by the Board. Among the officials, the Secretary is the chief administrative officer of the exchange upon whom rests much of the responsibility for the smooth functioning of this machinery. He devotes himself entirely to the business and affairs of the exchange. He is aided by one or two assistant secretaries and other clerical staff. There is another important officer—the Manager or Superintendent—in charge of the Clearing House. He looks after all affairs pertaining to the Clearing House, and is held responsible for the leakage of information with regard to a member's position.

Committees: The detailed affairs of the exchange are handled by a number of Committees. A Committee consists usually of five or seven members, but at times, there may be only three. The Board appoints one or two members of its own at the head of most of the committees. The term of a committee is one year or less at the discretion of the Board. Their duties are aptly described by the very names they bear.¹¹ The work of some of them is formal. Their functions are prescribed by the bye laws and rules of the exchange. While the different committees play an important part in the administration of the exchange machinery, the final control lies with the Board.

Rules and Regulations: One of the main reasons for the organisation of exchanges was the need felt by traders to adopt rules and regulations for preventing illegitimate trade practices in cotton dealings. The exchanges established definite rules to govern marketing in general and futures trading in particular. These rules were designed to insure fair and equitable treatment to all. They

¹⁰ On some exchanges, however, the terms of all directors do not expire by the end of each year. Either one half or two thirds of the Board retire in rotation and the required number is elected annually.

¹¹ e.g. Arbitration, appeals, rates, rules, information and statistics, membership, finances, building, bye laws, futures, business conduct, ring, standards, executive, supervisory, warehouse and delivery, classification, adjudication, clearing house, complaints, control, etc.

were framed to promote uniformity in customs and usages as well to facilitate impartial and speedy adjustment of business disputes. The original rules and regulations have been altered, amended and repealed from time to time to suit changing conditions. Those in use today are therefore substantially different from the original ones. They may be divided for our purposes into two principal headings: (1) disciplinary or prohibitive or restrictive in character and (2) prescribing methods of procedure. Both these divisions refer to the conduct of business, e.g. commission for buying and selling contracts for future delivery is definitely fixed by rule, and members must abide by it. Again there are rules for arbitration which provide the means of settling disputes, analogous to civil actions at law. The infringement of rules and regulations results in a strict disciplinary action such as, suspension or even expulsion from membership in severe cases. The exchange enforces its own rules of conduct and discipline by a procedure analogous to that of the criminal courts. The accused member is entitled to a trial before the Board who is the ultimate authority. If guilty, the penalty varies up to the maximum of expulsion according to the nature of the offence.¹² In the case of suspension, the privileges of membership are withheld for a period of time and a member is debarred from membership in the case of expulsion. The former penalty requires a majority vote of the Board, and the latter a two-thirds vote.

6 VARIOUS TYPES OF ORDERS

While trading for clients, members are called upon to execute several kinds of orders.

Market Orders: The usual orders, known as market orders, are to buy or sell certain amounts at the best price obtainable. Unless limited as to time or price they are intended to be executed immediately on receipt and are handled accordingly. A broker receiving the market order to buy will usually bid slightly under the last transaction and continue to increase the price of his bid until the order is executed and vice versa in the case of a selling order. It follows that customers using this type of orders must usually expect to sacrifice a small fraction for the sake of certainty and promptness of execution. Those who are interested in price movements of longer duration consider a fractional variation as incidental and buy or sell at the market rates.

Limited Orders: Any order at a limited price is understood to be good for the day only, e.g. 'Sell one May at Rs. 425 /-' or 'Buy one May at Rs. 400 -'. When trading is active such orders reach the market continuously. An order to buy or sell at a specified price means that the transaction is to be execut-

¹² The gradation of penalty is that a severe reprimand is supposed to be a lesser penalty than a fine and a fine to be lesser than suspension and suspension to be lesser than expulsion.

ed, if execution is possible, during the day at the price named.¹³ These orders are usually used to acquire or add to a market position either long or short. They are employed in preference to market orders, for, the price of execution is determined by the trader who would rather like to trade at a certain price level than at an uncertain market figure. This is more so when the market is widely fluctuating.

Stop-Loss-Orders: An order which is terminated with the word 'Stop' is a 'Stop-Loss-Order.' This order does not become effective until the market price is bid at or above the price stipulated if it is a buying order, or in the case of a selling order until the market price is offered at or below the price stipulated. Such orders become the market orders if the fluctuations in the market carry the price to that named in the buying or selling order. The order is executed as soon as the named price is reached as is practicable but not necessarily at that price. The name of this order suggests its use. It is to stop a loss which may be actual or apparent. It is also used to close or reduce a long or short market position. Stop-loss-orders are given by traders who desire to retain their holdings, thus conditionally, if the movement of the market is in their favour. The buyer or seller sets a price at which he wishes his contracts to be closed out, should the rise or decline reach that point. Such orders are not infrequently given in periods when wide and rather rapid fluctuations are taking place.

Switch Orders:¹⁴ These are orders to buy one position of a futures contract and sell another in the same market. Unless the difference between the two positions is stipulated it is understood to be executed at the trading differences.

Straddle Orders:¹¹ Straddle orders differ from the Switch orders only to the extent that they are orders to buy a stated position of the contract in one market and sell a stated position of the contract in another market. Both these types of orders are used by merchants carrying an unsold stock of cotton. They merely move the hedge from one position of the contract or market to another that may offer more favourable terms. Since the object of both these types of orders is to reverse one's transaction in each position of the contract or market and clip a profit they are availed of by the speculators to take the advantage of temporary disturbance in their price relationship.

Conditional Orders: Conditional orders are placed with a broker pending the issue of certain events. The order, for instance, may be to buy or sell upon the crop reports coming to a stipulated figure.

¹³ Some of these orders bear the words 'G.T.C.' meaning thereby 'Good till Cancelled.'

¹⁴ In India, Switch or Straddle Orders are referred to as 'Badla' business. See also chapter on 'Futures and Badla Operations'.

Discretionary Orders: Discretionary orders may be to buy or sell at the time and price the broker thinks best. The idea is that the broker is in a better position to estimate the market than the customer. This gives some latitude to a member executing the order and at the same time more responsibility as to the best obtainable price. Hence, some firms do not prefer to execute such orders and responsible concerns rather refuse to carry them out.

Puts and Calls: There are orders to deal in 'options' known as puts and calls' or 'Teji mandi' transactions. These orders are intended to secure a right or option to buy or sell at a stipulated price, the given position of a futures contract at any time before the due date.

These are the various kinds of orders¹⁵ generally employed by clients in buying or selling futures. Out of these, the most common are the 'market', 'day or limited', 'stop-loss-orders', and 'puts and calls'. Because they are generally well-understood both by the customers and brokers, their use is popular.

7 THE TYPICAL PROCESS

Members work in two capacities, i.e. trading for themselves and/or for clients. In either case, a member has to give an order for execution in the ring to one of his authorised representatives. If the order for buying or selling is to be executed at the market rate, the representative goes to the ring and after ascertaining the rates prevailing executes it. In the case of an order to be executed at a particular limit he remains in the ring and watches the market. As soon as the order is executed, the transaction is noted down in a pocket diary or 'slip book' maintained by the parties concerned. The transaction is then soon confirmed orally. Next morning, the representatives usually meet together and a confirmatory signature is taken.

(a) **In the Case of a Member:** Suppose, member A wants to buy at market rate 100 bales Jarilla May contract. The order is given to a representative in the ring who finds the rate prevailing at Rs. 400/- and buys at Rs. 400/4¹⁶. He immediately communicates the purchase to the office where it is entered in the 'business book'. Now when the price goes higher, say, Rs. 410/-, A wants to sell the same 100 bales and gives the order to his representative. The sale is effected at Rs. 410/- and reported to the office for necessary note. The 'business book' provides for all relevant entries with buying on the right hand side and selling on the left hand side of the page.

¹⁵ These types of orders are also used in the buying and selling of stocks and shares involving more or less the same procedure in execution on the stock markets.

¹⁶ In case of a sale, the realisation is the actual rate prevailing, i.e. Rs. 400/- in this particular case. Thus there is generally a difference of Rs. 4 per candy which is known as 'jobber's turn'. In case of foreign markets this difference is one point per lb.

(b) **In the case of a Non-Member:** The procedure for the execution of a non-member's order is the same but the maintenance of accounts differs. In the members' ledger separate accounts are maintained for each client and the business is entered from time to time. When the transaction is closed by the client the difference due from or to him is calculated and entered in the respective columns. The client's business may be based on either margin basis or settlement basis. In the former case, accounts are settled when transactions are closed or when the client wants to settle the account. In the meantime, however, if before the transactions are closed the market goes against the client, the member calls for replenishment of the margin. If the client wants to keep his business standing, he has to comply with it. In case, the client does not comply with the margin call, the member is at liberty to close the transaction when he thinks fit without giving any further notice. When business is done on settlement basis, the member prepares a statement of accounts of his client at the time of the periodical settlement taking the settlement rates as basis and payments are made or received accordingly. If any business is outstanding at that time the settlement rate fixed by the association is applied and the difference is calculated. The outstanding business is then carried forward at the settlement rate.

CHAPTER V

DESCRIPTION OF FUTURES MARKETS

IN the last chapter organisation of futures markets and their common features have been described. This chapter deals with the general description of the different cotton futures markets of the world. The Indian futures markets at Bombay, Karachi, Ahmedabad, Surat and Indore deal wholly in Indian cotton. The American markets at New York, New Orleans and Chicago deal in American cotton. On the Liverpool market, dealings are in American, Egyptian, Indian and British Empire Cotton. Alexandria naturally confines itself largely to Egyptian cotton, whilst at Havre, Bremen and Osaka, the bulk of dealings are in American cotton.

1. INDIA.

The East India Cotton Association: In India, the East India Cotton Association is regarded as the premier cotton futures market, both from the point of view of price quotations and from the standpoint of volume of business put through. This market is at present working under the Bombay Cotton Contracts Act, 1932, which gives it official recognition.¹ The association consists of three different classes of members: (1) full members, (2) associate members and (3) special associate members. A full member has to pay as deposit a sum of Rs. 20,000 if he is a British subject and Rs. 50,000 if a foreign subject. The deposit bears interest at 3% per annum. Each such member has to pay an entrance fee of Rs. 2,500 and an annual subscription of Rs. 200/-. The qualifications for membership are that the applicant should have traded in cotton in Bombay for a period of not less than three years and have a place of business in Bombay. An associate member pays a deposit of Rs. 1,000 if he is a British subject and Rs. 5,000 if a foreign subject. The deposit bears interest at 3% per annum. An associate member has to pay an annual subscription of Rs. 50 and Rs. 100 respectively. The qualifications for this class of membership are that the person should be actually engaged in the cotton trade and have a place of business in British India. He shall have no vested interest in the association. He is neither entitled to trade in the ring in his own name nor to make use of the clearing house. He has no right to be present at a general meeting nor can he act, under any circumstances, as a director or vote on any panel.² The third type of member is called

1 This Act is replaced by the Bombay Forward Contracts Control Act of 1947. For details refer to Chapter on 'Regulation.'

2 Article No. 12 (ii) the By-Laws of the E.I.C.A. For amalgamated members refer to Chapter on 'Regulation.'

a special associate member. On March 31st 1922 he was a member of the clearing house established by the Cotton Contracts Board or a broker licensed by that Board and applied for membership of the association on or before the date mentioned. He then paid a deposit of Rs. 5,000. On this he gets interest at 3% per annum. He pays an annual subscription of Rs. 200. The difference between the position of an associate member and that of a special associate member is that the former has no right while the latter is entitled to trade in the ring in his own name and to use the clearing house. In other respects both stand on the same footing, that is, they have no vote, no vested interests in the assets of the association, nor are they entitled to be present at a general meeting, to vote on any panel, and under no circumstances, to act as directors. On 31st August 1946 the total membership on the Register of the association was 536 as against 537 in 1945.³ The membership is comprised of merchants, factory owners, brokers, commission agents, spinners, importers, exporters and speculators. The liability of the members is limited.

The Board of the E.I.C.A. is made up of three panels viz., (1) buyers, (2) sellers, and (3) brokers. The first two panels elect four directors each, and the third six. They form the Board of elected directors. At their first meeting after the annual election the elected members co-opt one director who is called the 'co-opted director' to represent the general body of members on the Board. Five directors are nominated to represent the growers of cotton; three by the Indian Central Cotton Committee from the growers' representatives on that Committee and two by the Government of Bombay. These five directors not having dealings in futures contracts may or may not be members of the association. As directors, they are entitled to attend and vote at all meetings. But they are not entitled to vote in respect of an appointment of a co-opted director. Thus, in all, the directors on the Board are not more than 20.⁴ Each director other than those nominated should be a British subject and an authorised representative of a member belonging to one of the aforesaid panels.

So far as the equipment is concerned, the association owns two buildings, one at Sewree and the other at Kalbadevi. The building at Sewree, known as "Cotton Green" with warehouses and storage grounds around it, is conveniently situated for business in spot cotton. It contains buyers' rooms, sellers' rooms, a large trading hall and an extensive arbitration room for examining samples of cotton. The building at Kalbadevi is called the

³ "436 full members, 6 special associate members and 94 associate members". 25th Annual Report of the E.I.C.A.

⁴ Article No. 51 of the Articles of Association of the F.I.C.A. provides that there shall not be more than 20 and not less than 12 directors inclusive of the president and vice-president of the association.

'Cotton Exchange' where trading in futures is carried on.⁵ Kalbadevi is considered to be one of the best centres of trading activities in Bombay, for, there are other markets nearby dealing in silver, gold, cotton yarn, seeds, grain, etc. The exchange at Kalbadevi comprises of a basement, a ground floor with two galleries and six upper floors. The trading ring is located on the ground floor. There are telephone cabins constructed for members on both sides of the ring on the ground floor and in the two galleries, numbering in all 114. The top floor accommodates the clearing house and administrative offices. The remaining five floors contain 113 rooms for members' offices. On the first floor there is a visitors' gallery on one side of the ring and on the other side a bridge where quotations are posted.

The Bye-laws of the E.I.C.A. prescribe three different kinds of contracts: (1) forward hedge contract, (2) forward delivery contract and (3) ready contract. A forward hedge contract is nothing but a contract in futures. For the purpose of trading in futures there is a system of one hedge contract called the "Indian Cotton Contract" or better known in the business parlance as the "Jarilla Contract." It is a contract based on Fine Machine ginned Jarilla cotton with $\frac{3}{4}$ " staple. Though the standards prepared differ according to the character of the individual growth, the most usual standards are "Extra Superfine, Superfine, Fine, Fully Good and Good." The standard basis is fixed on the spot value of cotton constituting the basis of the contract. The spot values of various growths tenderable under the hedge contract are fixed for the delivery period by the Daily Rates Committee or by a panel of the Appeal Committee subject to a right of appeal to the Board.⁶ The tendering difference between the standard and spot values of cotton tenderable under the contract is calculated upon the spot values fixed as above on the first working day previous to the tender.

The three main classes: "Fully Good, Fine and Superfine" with the customary interpolations are the pillars of the Bombay system of classification. The premiums or discounts on the grades above or below the basic grade are fixed by the Quotation Committee on a periodical basis. The system in vogue is therefore known as the 'periodical system' of fixing differences. The deliveries are made in Bombay. The months of delivery for the Jarilla contract are January, March, May, July and September. There are now

⁵ By a long standing practice of many years, futures trading was duly carried out in two separate—mudday and afternoon—sessions held at two different places. The mudday session usually took place at the Marwar Bazu (Kalbadevi). In the beginning the afternoon session took place at Colaba under the regime of the Bombay Cotton Trade Association until it was replaced by the Cotton Contracts Committee and later on by the Cotton Contracts Board and since June 1922, under the regime of this association. In 1923, the trade was removed to Bazaar and the session was held there. In 1937, a new building was erected at Kalbadevi for futures trading without distinction of mudday and afternoon sessions.—Personal Investigation.

⁶ Refer to Chapter on "The hedge contract system for Indian Cotton" for detail.

all single delivery periods in vogue on the E.I.C.A. This period runs from the 1st to the 25th day of each month or position.

The unit of a tender against the contract in futures is 50 bales. Tenders are made through the clearing house on the first and the last working days of each delivery period and on every Monday, Wednesday and Friday between these days, holidays and settlement days are being excluded. Futures contracts are subject to periodical settlements through the clearing house and bear interest. As a rule, parties to the contract must be members of the association.

When tenders are made and disputes arise, parties resort to arbitration. A system of blind surveys and appeals has been introduced by the association since October 1937 to replace the old one which was the subject of much criticism. Under the old system the parties used to appoint their own surveyors which is not the case under the present one. Now-a-days, there is a survey committee appointed annually by the Board. This committee is composed of not more than 25 persons from the members or their authorised representatives. It is divided into five panels of five persons each and the surveyors function through these panels. The day or days on which the members of each panel are to act is determined by the secretary by drawing lots. The surveys are held by persons who are not aware of the names of the disputed parties. The results of the draws are kept secret and surveyors are only informed of their turn to act on the day fixed. This is known as the 'Blind Surveys'. The five members of a panel start their work by a batch of two under the direction of a chairman appointed by them. In case of difference regarding the award, the chairman appoints anyone of the remaining surveyors as an umpire. The award of the surveyors or umpire is subject to a right of appeal to the appeal committee. This committee consists of 12 persons appointed by the Board and is divided into two panels of six persons each by drawing lots. Each of these panels deals with appeals on one day only. No member of the appeal committee can be a member of the survey committee.

The market is formally opened and closed by the ringing of a bell during a business day. As soon as the market opens, trading immediately begins in the ring. The business hours vary according to the seasons in India but are generally fixed at 11-30 a.m. to 5 p.m. in Winter, and at 11-30 a.m. to 5-30 p.m. in Summer. At the time of the American Bureau report on the cotton crop, the market remains open up to 11 p.m. On account of the war-time disturbance all futures markets in India were closed by the Government of India for a few months from the middle of May 1943 to the end of October 1943 and even the E.I.C.A. was not an exception to this. Since then the trading hours are reduced to 5 hours a day from 12 noon to 5 p.m.

The prices are quoted in Rupees and sixteenths of a rupee per

candy of 784 lbs. A small change of annas two per candy is equal to Rs. $3\frac{1}{2}$ per contract. There are limits on daily price changes known as 'floors' and 'ceilings', i.e., the lowest and the highest levels to which prices can fluctuate in a given day or for a given position of the contract. The kinds of transactions permitted to be executed take the forms of outright purchases and sale of futures. The members also buy and sell options known as 'Teji-mandi' either double or single. Orders both for futures and Teji-mandi business come from all parts of India as well as from abroad. The transaction is made openly across the ring. Traders indicate a purchase or sale by throwing their hands out or in, with the words 'Lyo or Dyo' conveying thereby 'take or give'. By way of throwing the hand in, they usually denote purchase and the reverse motion of the hand implies sale. The price and amounts are signalled by fingers. The transactions are confirmed by the contracting parties. The members are supposed to require a margin from their customers, whether an associate member or a non-member. However, the amount of margin is purely a matter of mutual arrangement. There is a system of 'Havalas' which is freely resorted to in case of a party having any doubt regarding the financial standing of the opposite party. Closed contracts are set off and only open contracts are passed for clearing. The rate of commission chargeable under the rules by a member to his clients is $\frac{1}{2}\%$.

The association publishes the following statistical reports:—

- (a) The Bombay Bi-weekly Statistics.
- (b) The Bombay Weekly Statistics and
- (c) The Indian Weekly Statistics.

The first two give the movements of cotton in Bombay whereas the imports and exports of cotton into and from the chief ports of India are given in the third. In addition, the association publishes the Bombay Cotton Annual which contains statistical tables of crops, exports, imports, prices, stocks, consumption and Government notifications. This publication, it seems, has been designed primarily to meet the requirements of all those interested in the production, distribution and consumption of Indian and foreign cottons, yarn and piece-goods.

The Karachi Cotton Association: The organisation and working of the E.I.C.A. have been described above in detail. Nearly all Indian markets work on similar lines and therefore while dealing with them only such points which require special mention will be explained.

Next in importance, comes the Karachi Cotton Association. This

7 "Havalas" means square up the transaction or adjust the books.

8 Our enquiry shows that due to cut throat competition in the trade the rate charged is only $\frac{1}{4}\%$ and at times, as mutually arranged.

association is a corporation with limited liability of its members. It is recognised under the Act of 1944 by the Sind Government.

The membership is comprised of two classes: (i) Original members and (ii) members. The deposits, admission fees and annual subscriptions to be paid by the members of the two classes and their qualifications are as stated below:—

(i) Original Members: Prior to September 1935, an original member had to pay a deposit of Rs. 3,000 bearing interest at 3½ per annum and an annual subscription of Rs. 75/- or such other sum not exceeding Rs. 200/- as the Board determines. He must have a place of business in Karachi, and must have applied for membership before the 1st September, 1935.

(ii) Members: If a British subject, a member has to pay a deposit of Rs. 10,000, otherwise Rs. 20,000 bearing interest at 3½ per annum and an admission fee of Rs. 500/- and annual subscription of Rs. 75/- or such other sum not exceeding Rs. 200/- as the Board determines. He must have traded in cotton in Karachi for at least one year and he must have an office there.

The total number of members of both the classes registered was 130 on 31st August 1939.⁹ The brokers in Karachi are not the members of the association. The Board issues annual licences to brokers through whom the members are required to deal with each other.¹⁰ The licence fee is Rs. 25,- and its renewal fee is not less than Rs. 5/- or a sum not exceeding Rs. 50/- as determined by the Board.

So far as the constitution of the Board is concerned, it is composed of two principal interests: viz., the buying side consisting of buyers and exporters, and the selling side of sellers and others. The Board is composed of 17 members (8 buyers/exporters and 9 sellers/others) elected annually by the general body. The Board elects the chairman and vice-chairman from its members.

The association has its own building consisting of a ring, administrative offices and rooms for members. For the purposes of trading in futures there are five hedge contracts, viz., (i) Superfine M.G. Sind Contract, (ii) Fine M.G. Punjab Contract, (iii) Fully Good M.G. Punjab Contract, (iv) Fine M.G. 4-F and (v) Fine M.G. N.T.-289-F. The basis for numbers 2, 4 and 5 is "Fine", for number 1 "Superfine" and for number 3 "Fully Good". Standards are prescribed as 'half a class off, pass and one class on'. The staple of 4-F contract should be not less than 3/4" and that for N.T. not less than 7/8" in length. The months of delivery in all cases are single; viz., December, January, March, May and

⁹ Annual Report: 1938-39: The Karachi Cotton Association, p.19.

¹⁰ On 31st August 1939, there were 299 Licensed Brokers on the Registers of the Association.

July. In the case of the Sind contract, November is also actively traded in. 'On' allowances for better staples and 'off' allowances for staples less than $3/4''$ and $7/8''$, in case of contract numbers 4 and 5, are fixed by the Board from time to time.

In matters of arbitration the Board elects a panel of arbitrators who act as umpires as well. All disputes are referred to the arbitration. Karachi has also introduced the system of Blind surveys and appeals prevailing in Bombay.

The Karachi cotton association's special feature is that it issues a monthly bulletin and daily market report, besides the cotton annual.

The main points of differences between the two organisations at Bombay and at Karachi are: (a) The former maintains panels and the Board is elected not jointly but sectionally, while in the latter there are no panels and the Board is elected on a principle of joint electorate system with reservation of seats for buyers and sellers. (b) The character of membership differs in the sense that the first has three classes with comparatively higher amounts of deposits and dues, while the second has only two classes with lower amounts of deposits and dues. (c) The position of Karachi Brokers is peculiar since they are regarded as scalpers or at the most, floor traders, as compared to that of Bombay brokers. (d) Both the associations conduct most of the spot business in their respective fields.

Shri Mahajan Association, Bombay: Shri Mahajan Association, Bombay, is India's third futures market. This is a body with limited liability of its members but without the stamp of official recognition from the Government of Bombay. The Board consists of 21 members of whom 17 are elected and four are co-opted at every annual general meeting. The members are divided into two classes, viz., ordinary and honorary. An ordinary member has to pay a sum of Rs. 2,501 as admission fee plus the annual dues. Any resident of India interested in the growth and trade of Indian cotton is eligible for membership. The definition, according to the Articles of Association, of an honorary member is that businessmen from any part of India, members of the Provincial Legislature or any other gentleman whose admission as a member is likely to be beneficial to the association shall by a resolution of the Board passed by $3/4$ majority be admitted as an honorary member. He has not to pay admission fee or annual dues. There are 610 members on the register of the Association,¹¹ perhaps, the highest number on record in India.

The notable points in connection with this institution are: (i) the Unit for trading in futures is 10 bales, (ii) there is no clearing

¹¹ Annual Report of the Shri Mahajan Association, Bombay, 1938-39.

house. They have a system of periodical settlements and on every Saturday the quotation committee fixes prices for that purpose. Members have a right to ask for Havalas should they feel so. This market is rendered however defunct since May 1943.¹²

The Ahmedabad Cotton Brokers' Association and the Ahmedabad Cotton Exchange and the Gujarat Cotton Brokers' Association: There are three futures markets in Ahmedabad. They are organised and functioning on more or less the same principles. The main points are: (i) smaller unit of 10 bales, (ii) no clearing house. There is a periodical system of settlements with Havalas freely resorted to. (iii) The prescribed trading limits for members are 1500 bales in the former case and 500 bales in the latter. Any member trespassing the limit is often called upon to pay Rs. 20/- per candy as margin. (iv) There are no panels. The Board consists of 11 to 15 members elected every year. (v) To become a member of the former association, one has to pay Rs. 2,000 as deposit, while the latter organisations charge only Rs. 101/- as admission fee. (vi) The latter has two managing directors working as the chief executive officers against a secretary and president in the former for the same purpose. (vii) There is no arrangement for actual delivery being given or taken in Ahmedabad.¹³ They have arranged for such deliveries to be effected in Bombay. These bodies are however rendered defunct since May 1943.

The Surat Cotton Merchants' Association: There is a cotton futures market in Surat too. The lines of organisation are mostly copied from those of the Bombay Mahajan Association. Hence, the working is similar to that of the parent body. The only point worthy of note is that the Surat association has a unit of 5 bales only,¹⁴ perhaps, the smallest in the world's cotton futures markets. This association has been rendered defunct since May 1943.

The Indore Cotton Committee: The cotton futures trading at Indore is conducted under the auspices of the Indore Cotton Committee. The operators have to pay to the Indore State a tax of Rs. 5/- per every 100 bales bought and sold. There is neither a fixed unit nor are there any fixed hours of business. Popularity of this market lies in the huge business put in by way of Teji-mandi which at times affects even the price level on the E.I.C.A.¹⁵

2. THE UNITED STATES OF AMERICA.

The New York Cotton Exchange: The New York Cotton Exchange is an incorporated body working under a special Act of

¹² Refer to Chapter on 'Regulation' for details.

¹³ In view of this, the exchanges in Ahmedabad may be regarded as 'gambling dens'.

¹⁴ Article of the Surat Cotton Merchants' Association.

¹⁵ Personal talk.

the State of New York. It has a Board of managers consisting of 18 members elected every year.¹⁶ A member pays an entrance fee of 1,000 dollars and an annual subscription determined by the Board. The exchange has a limited number of members, 450. A member has to hold at least one 'seat'.¹⁷

The exchange has a building having 20 floors, of which the 19th floor is mainly a large hall known as the 'trading floor'. It contains the ring, telephone booths, telegraphic equipment, blackboards and a gallery. Trading hours are from 10 a.m. to 3 p.m. on Mondays to Fridays and from 10 a.m. to 12 noon on Saturdays. The opening and closing are announced by the striking of a gong in the ring. There is a system known as a 'call'. An officer of the exchange conducts the calls of each delivery month in turn and establishes the price level for all positions of a futures contract. At the end of a call, trading becomes open. Other calls take place at 12-15 and 2-15 p.m. respectively. The exchange has been in continuous operation since its inception except for temporary closing at the outbreak of the war in 1914 and during the bank moratorium in 1933.

There is one uniform contract called 'Middling'. Its unit is 50,000 lbs. in about 100 square bales, gross weight. It has a minimum staple length of $\frac{7}{8}$ " with the 'White middling upland' as the basis. Delivery may be made at one of the specified places at the seller's option.¹⁸ In effecting delivery a notice of five business days is required to be given by the seller. Every contract calls for delivery either in the current month or in any of the succeeding eleven months. The active months are January, March, May, July, October and December and the trading is concentrated only in these six months. The price is quoted in cents and hundredths of a cent per pound. Each hundredth part is known as a 'point' and is equal to 5 dollars on a 100 bales contract. The exchange rules provide that transactions shall not be made in one day at more than 200 points per pound above or below the closing prices of the previous day nor at a greater range in prices than 200 points a pound above the lowest or below the highest of the day.

The members are required to pay to the clearing house margin money for protection from loss on outstanding contracts. There are two kinds of margins: (1) original and (2) variation. Original margins are paid to cover ordinary fluctuations of prices during the course of a day. Variation margins are additional payments made subsequently, when and if called for by the clearing house.

16 Bye-laws and rules of the New York Cotton Exchange.

17 A few members hold more than one seat.

18 Delivery on New York futures contract may be made at New York, Norfolk, Charleston, Savannah, Mobile, New Orleans, Houston and Galveston.

to cover broader fluctuations in times of unusual price changes. The contract is subjected to a system known as 'daily settlement' as opposed to one of periodical settlement in Liverpool and Bombay. The discounts for lower and premiums for higher qualities than the basis are provided for. The difference is based on the prices prevailing in the designated Southern spot markets. The differences are averaged and used as the basis for calculation. The exchange applies the full average premiums and discounts for grades. It applies only 60% of the average premiums for cotton of 15, 16" and full inch staple. It does not allow any further premium for cotton of more than one inch staple. All cotton delivered on futures is classed by expert classifiers of the U.S. Department of Agriculture. The Department issues a certificate for each bale giving particulars regarding the grade, the staple and whether or not the cotton can be delivered on the futures contract. Hence, the words "deliverable qualities" and "certificated stocks" are in common parlance in America.

The brokerage to non-members residing in the U.S.A. and Canada is 15.00 dollars for 100 bales bought or sold while that for those residing outside the U.S. and Canada it is 17.50 dollars.¹⁰ For members it is half of the said amounts. The contracts in futures are subject to "U.S. Cotton Futures Act". We may add that the exchange maintains a statistical service and publishes a year book called "New York Cotton Exchange Year Book".

The New Orleans Cotton Exchange: The New Orleans Cotton Exchange is a Corporation domiciled in the city of New Orleans and chartered under the laws of Louisiana. It has a capital of 1,00,000 dollars divided into 500 shares at 200 dollars each. A member must hold at least one share. He has to pay the initiation fee of 500 dollars and annual dues of 150 dollars. Besides, he may be called upon to pay other fees and taxes. Only a person legally of age, good character, and commercial standing, is qualified for membership. In addition, the exchange accepts visiting members who pay dues but do no trading on the floor. The Board of Directors consists of 17 members including a president, a vice-president and a treasurer who are elected annually.

In the building owned by the exchange the trading room is on the second floor. There are two units of trading, one of 100 bales, as in New York, and the other, what is known as a 'job lot', of 50 bales. Two separate rings are maintained for the two separate units. Other facilities are the same as those in New York and the working is essentially conducted in a similar manner. The points of difference between the two are: (1) New Orleans opens and closes one hour earlier than New York due to time difference. (2) Each session opens with a call as at New York but there are

¹⁰ Byc laws and rules of the New York Cotton Exchange.

no subsequent calls during the day. (3) Contracts for future deliveries can be made as far ahead as the parties wish to enter which is not done in New York. (4) Commission for domestic non-member is 12.50 dollars for buying or selling as opposed to 15 dollars in New York. (5) New Orleans contract permits delivery at only 3 points as against 8 points on the New York contract. (6) In New Orleans, the cotton of 15/16" staple fetches the full premium and in the case of full inch staple 75% of the premium is received by the tenderer as compared to 60% in both the cases in New York.

The Chicago Board of Trade: On the floor of the Chicago Board of Trade, futures trading is conducted in many commodities including cotton. Business in cotton is carried on around a trading post, there being no separate ring for the purpose. The Chicago market is in almost all other respects rather organised on the same lines as of New Orleans. The points of difference are that there is only one contract of 50 bales as opposed to two at New Orleans and the contract is based on the delivery of bales compressed to a high density as against the standard density in New York or New Orleans. If a seller, therefore, tenders uncompressed or standard density bales in the fulfilment of the Chicago contract, the price is subject to certain adjustments.²⁰

3 EUROPE.

The Liverpool Cotton Association: The largest and most important cotton futures market in Europe is the Liverpool Cotton Association.²¹ The association is a corporation working under a special charter received from the Parliament of Great Britain. The capital of the association is £60,000 divided into 600 shares of £100 each and the shareholders have power to increase it.

There are two types of memberships: (i) Full member and (ii) Associate Member. A full member must hold one share and should be elected by the general body and approved by the Board. In the case of a non-British subject, there are certain restrictions.²² A member has to pay an entrance fee of £500 and an annual subscription as fixed from time to time. The associate members are divided into eight classes running from A to H and are subject to annual election. The annual subscription payable by each of these sub-classes is determined at the general meeting.

The Board of directors consists of not more than 19 persons including a president, a vice-president, a treasurer and not less

20 Opposite is the case in New Orleans or New York where compressed or high density bales are subject to price adjustments.

21 At present the Board of Trade has taken over the control and regulation of this association with the result that since 1946 the futures trading is rendered defunct in England.

22 Articles of Association of the Liverpool Cotton Association Article No. 3.

than 10, nor more than 13, Ordinary directors as well as not less than one nor more than 3 Associate directors. At every annual meeting the president, vice-president, treasurer and one-third of the Ordinary directors and one Associate director retire.

Like New York, this market has been in continuous operation since its inception except for brief interruptions due to war or other disturbances. It has its own building equipped with all the necessary facilities. In the trading hall, there are three rings; one large and two small for the various types of cotton dealt with in the market. The large ring is for American Cotton. Of the two small rings, one is for Egyptian Cotton and the other is jointly for Empire, Miscellaneous and Indian Cotton. The hours of trading begin from 10 a.m. to 4 p.m. on Mondays to Fridays, and from 10 a.m. to 12 noon on Saturdays. It is formally opened and closed by the ringing of a bell as in India, and trading in any position immediately begins. There are no 'calls' in Liverpool. All contracts for the purchase and sale of futures provide for the delivery of cotton within one year and one month after the month in which the contract is made. The positions of a futures contract most actively traded in are January, March, May, July, October and December. The Liverpool American contract, as in the case of a contract on American exchanges, has 'Middling' as its basis with the "universal standards" for grade. But the two contracts differ in respect of staple length, since, the former specifies 'fair staple' and is subject to the Liverpool Standard as against the 7/8" staple in the latter case with the U.S. Govt. Standard. The contract unit in Liverpool is for 100 bales of 48,000 pounds net as against 50,000 lbs gross weight in New York. The transaction as in futures markets in India and America is made openly across the ring and by the use of signs. Prices are quoted in pence and hundredths of a penny per lb. One point is the minimum fluctuation which amounts to $\frac{1}{2}$ per contract of 100 bales. Daily price changes are limited to 25 points only. The contract is on 'Settlement terms' and subject to weekly payments. It is interest bearing, as in India; this is not the case in the U.S.A. Apart from the outright transaction, options known as 'put and call' either double or single are availed of by the traders. Margin, are not required as in India, as opposed to the practice available in America. This is purely a matter of private arrangements both with regard to a member and a non-member client. The delivery, without notice, is made through the clearing house before noon on the first and last business days of a month or on any Tuesday and Friday in such a month. The additions or deductions for quality are settled by arbitration, the seller appointing one arbitrator and the buyer another. There are appeals and super-appeals in case of disputes. In the event of cotton of better staple than 13/16" being tendered, the seller makes to the buyer an allowance of 20% of the excess value of such staple cotton over 13/16". Otherwise, full

spot market premium for cotton on all staple measuring up to and including $1\frac{3}{16}$ " is allowed. Like the American exchanges, the Liverpool association allows full spot market differences for grade.

With regard to the Egyptian cotton, there are two contracts in Liverpool; (1) Sakel and (2) Uppers. The Sakel contract is based on 'Sakellaridis' grown in Egypt or Sudan (Giza No. 7), and the Uppers contract on 'Upper and/or similar varieties of cotton grown in Egypt including Pillion cotton.' The contract unit in each case 24,000 lbs. net or 33 bales. There are thirteen trading months under the Egyptian contracts. Full allowance is made in the case of a tender for both grade and staple value except that the allowance is limited to 3d. per lb. or the value of Good Sakel whichever is higher on the day of the tender.

Referring to the 'Empire and Miscellaneous' contract it provides for the delivery of cotton grown in any country which is "at least equal in value to the Universal Standard for Low Middling American cotton, but not below the grade of that standard and of not less than Fair Staple, etc. or Punjab American cotton which is not Fine in grade and not less than Good Staple."²¹ This contract covers American, African, Australian, South and Central American, Mexican and Russian Cotton, excluding the varieties included in Sakel and Uppers contracts. The unit of the contract is 24,000 lbs. but the number of bales varies according to the weight of the growths delivered.

Finally, there is a special contract for the East Indian Cotton. It is based on the 'Superfine C.P. Oomra No. 1' Liverpool Standard, with staple not less than of Oomra No. 1. Thus only the longer stapled variety of Indian cotton such as Broach, Suratee, Navasari, Punjab American, Cambodia, Tinnevely, etc., can be tendered against this contract. The contract unit is 39,000 lbs. normally, meaning 100 bales, the weight of an Indian bale being 392 lbs. net.

The association collects and publishes many data as in the case of Indian and American exchanges. These data relate to the home and other markets as well as to significant facts outside the markets. Most of the information collected is published in the form of notices on the Bulletin board. In addition, a daily report, a weekly circular giving detailed information in both summary and comparative forms and an annual report in the nature of a yearly summary are the publications of the association.

The Havre Exchange: The Havre Bourse (exchange) provides

a large trading room for dealing in cotton futures. The peculiarity of trading on this market is that the traders do not openly make their bids and offers but negotiate individually in private talks. There are no rings but pillars around which trading activities in various commodities including cotton are carried on. The membership consists of brokers only, who work on a commission basis and are called 'futures brokers'.²¹ These brokers assemble around the cotton pillar at about 10 a.m. and at 10-15 a.m. get together in a special room where an opening call is held. Another call is held at 4 p.m. Prices established on the first and second calls are posted on a black board in the trading room. One of the brokers elected to be the president for a week conducts the call. Prices are quoted in terms of Francs and centimes per 50 Kilos. The trading terminates at about 5 p.m. A contract unit is 11,000 Kilos or 24,250 lbs., net weight in about 50 bales. Contracts are made for delivery in the current month and in any of the succeeding eleven months. The active months are January, March, May, July, October and December. Only in American cotton, trading in futures takes place and the contract is a basis 'Middling' one, the U.S. Govt. Standard. The staple length prescribed is 23.5 millimeters Havre Standard, equivalent to 29/32". Though the basic grade of the contract is similar to that of the U.S.A. or Liverpool contract, it is slightly better in staple. The cotton tendered is classed for grade and staple by an arbitration committee of the Bourse. No premium is allowed for additional staple length but premiums or discounts are allowed for grades above or below Middling. These differences are fixed in advance at general meetings held four times a year; the periods being March, June, September and December. Here is an example of a system known as 'fixed differences' as opposed to that of "Commercial differences'. Each contract must be covered by an ordinary and if necessary by a variation margin deposited with the clearing house. There are no limits on the daily price changes. The commissions are based on mutual arrangements.

The Bremen Cotton Exchange: The Bremen Cotton Exchange has its own building with all necessary facilities. Contrary to the practice existing at Havre, trading is conducted openly around the ring. There are two trading sessions in a day: (i) from 11-15 a.m. to 12-30 p.m. and (ii) from 4-20 p.m. to 5-30 p.m. The business officially opens and closes by the ringing of a bell. There are four calls daily conducted at the opening and closing of the two sessions. As at Havre, only American cotton is dealt in and the unit is of 50 bales. The Bremen contract has the Middling

24 There are some brokers who are sworn in and known as "Sworn brokers" for service as experts in courts.

as a basis the U.S. Govt. Standard, with 28 millimeter staple, Bremen Standard equivalent to 15/16". Thus, the Bremen contract has the same grade but its basic description is of a longer staple than that in Liverpool, the U.S.A. or Havre. This contract unlike that at other markets permits the delivery of cotton of shorter staple than the basic staple length. The seller in that case has to allow the buyer a discount for the staple deficiency. On deliveries of cotton longer than the basic length up to and including 28/29 millimeter staple, premiums are allowed equal to 60% of the prevailing spot market differences for staple as officially computed by the exchange. On deliveries of cotton longer than 28/29 millimeter no additional premiums are allowed over and above that applicable to 28/29 millimeter. Differences are established every week by a valuation Committee of the exchange. Deliveries are made at Bremen, Bremerhaven or Westermunde. Prices are quoted in cents and hundredths of a cent per pound with the smallest change equal to 2 50 dollars on a contract of 50 bales. There are no limits on the daily price fluctuations. The contract is subject to daily clearing and settlements. Every contract must be covered by a margin of 150 dollars per contract deposited with the clearing house. The commission charged is 25 dollars per 50 bales and varies with the price. The exchange engages paid classifiers for the purpose of classing the cotton submitted for delivery and arbitration. The names of the parties concerned are not disclosed to these classifiers. The cotton classed once for delivery on futures need not be re-classed under ordinary circumstances.

4 JAPAN

The Sampin Exchange: In Japan trading in cotton futures is conducted under the auspices of the Sampin Exchange at Osaka. There are no rings but transactions are made openly on the floor. Trading is mostly concentrated at calls. There are five calls for cotton conducted by the exchange employees at brief intervals during a trading day. The contract is a 'strict middling' contract, the U.S. Govt. Standard. It may be emphasised that the basic grade is higher than that of either the American or European markets and the Middling is the lowest grade deliverable. The staple length prescribed is 7'8", the U.S. Govt. Standard as is the case with the contract on the American markets. Premiums and discounts are allowed for grade. As to staple, premiums are allowed up to 15/16". There is a system of "Fixed differences". Each month the Board fixes the differences on the recommendation of a committee on differences. The exchange maintains its own inspectors to class the cotton and to certify it for delivery. This classed and certified cotton

is re-classed twice a year; April and October. There are 12 Appeal Committees. A disputant may resort to any one of such committees. Trading is confined to deliveries in the current month and the succeeding six months. The contract calls for the delivery of 36 piculs net weight, equivalent to 4,800 lbs. Delivery can be made either at Osaka or Kobe.

5. EGYPT

The Alexandria Exchange: In Egypt²⁵ the futures trading in cotton is carried on at Alexandria. The futures market is conducted under the auspices of the "Commission de la Bourse de Marchandises." The trading opens in the morning at 10 a.m. and closes at 1 p.m. There are three contracts: (i) Sakel—long staple and (ii) Ashmouni—short staple and (iii) Giza No. 7. The basis is "Fully Good Fair". The grades ranging from "Good, Fair to Good" can be tendered against the fulfilment of futures contracts. On an Ashmouni contract delivery of brown and pilion cotton is admitted²⁶ and the contract therefore is subject to price allowances fixed by a Special Committee. This committee is elected by the members and meets on the day preceding each delivery date of the contract to fix the price differences. Deliveries are made in the warehouses located in the district of Alexandria. Any dispute arising in connection with the delivery on futures is submitted to the Arbitration Committee consisting of 30 members. Three of these members whose names are drawn by lots by the president are asked to examine the cotton. They do not know to whom the cotton belongs. If the result of arbitration is not accepted by one of the parties, there is an appeal committee of at least five members whose decision is final. Every care is taken that the members of this Committee are not aware of the parties in dispute.

Thus, there is a blind system of surveys and appeals in Egypt. The months of delivery for the first contract are November, January, March, May and July and those for the others are October, December, February, April, June and August. The active months are November, January and March as well as October, December and February. Prices are quoted in terms of Egyptian dollars per Kantar, equivalent to 100 lbs. The trading unit is 250 Kantars of about 37 local bales or 50 American bales. The commission varies with the price.

²⁵ Egypt had to close the Cotton Exchange at Alexandria during the World War II.

²⁶ Some information about the Egyptian cotton markets: 1926, G. D. Economou & Co.

Comparative Statement of the Principal features of

Name of the market.	Trading Hours.	Contracts		Grade	Basis— Staple
		No.	Unit		
East India Cotton Association	11.30 a.m. to 5.30 p.m.	1	50 bales	Fine M. G. etc.	3/4"
Karachi Cotton Association	11.00 a.m. to 5.30 p.m.	5	50 bales	Fine M. G. etc.	do.
New York Cotton Exchange	10.00 a.m. to 3.00 p.m.	1	100 bales	White Middling Upland.	7/8"
New Orleans Cotton Exchange	9.00 a.m. to 2.00 p.m.	1	50 and 100 bales	do.	do.
Chicago Board of Trade	9.00 a.m. to 2.00 p.m.	1	50 bales	do.	do.
Liverpool Cotton Association	10.00 a.m. to 4.00 p.m.	5	100 bales and various	do. and various	Fair average of the season.
Havre Exchange	10.00 a.m. to 5.00 p.m.	1	50 bales	Middling	29/32"
Bremen Cotton Exchange	11.15 a.m. to 12.30 p.m. & 1.20 p.m. to 5.30 p.m.	1	50 bales	do.	15/16"
Alexandria Exchange	10.00 a.m. to 1.05 p.m.	3	250 Kintars	F. G. Fair	Medium
Sampin Exchange	10 a.m. to 3 p.m.	1	36 Piculs	'Strict Middling'	7/8"

the Leading Cotton futures markets of the World.

Price quotations	Settlement terms			Delivery points	Fixing of differences	Brokerage Member Non-Member	Mode of arbitration
	Clearing	Margin	Int.				
Rs. and As. per candy	Weekly	Mutual	Int. bearing	1	Fixed system	By arrangement	Blind
do.	do.	do.	do.	1	do.	do.	do.
Cent and Cent-points per lb.¹	Daily	Original & variation	Nil	3	do.	\$15.00 \$17.50	do.
do.	do.	do.	do.	3	do.	\$12.50 \$15.00	do.
do.	do.	do.	do.	3	do.	do.	do.
Pence and pence points per lb.	Weekly	Mutual	Int. bearing	1	do	Varying for different contracts	do.
Francs and centimes per Kilos	Daily	Original & variation	Nil	1	Fixed system	Mutual arrangement	do.
Cents and cent points per lb.	do	Ordinary	Nil	3	Commercial system	\$25.00 & varying with the price	do.
Egyptian dollar per Kantar	Weekly	Mutual	Nil	Warehouses at Alexandria Dist.		Varies with price	do.
Yens per picul		do.	Nil	2	Fixed system	Mutual arrangements	Ordinary

6. WORLD MARKETS COMPARED

The points of similarities and differences in the operation and organisation of the various markets of cotton futures in the World have been described while dealing with them individually. In order to give a general idea at a glance a table showing the summary contrast and comparison is given on pages 64-65. It may be added that in the second part some of these aspects have been discussed with a view to consider their applicability to India.

CHAPTER VI.

CLEARING: METHODS AND MACHINERY

BEFORE completing this part, the methods and machinery of clearing a futures contract must be described, since, they form a part and parcel of the organisation of a futures market. For this purpose, we need to review the old methods of clearing and their utility to the trader, the establishment of modern clearing houses and their functions.

1. ORIGIN AND GROWTH OF CLEARING SYSTEMS

In the early days of futures trading, all contracts used to run to maturity. It was thought that contracts could only be fulfilled by actual delivery between the two parties.

Evolution: With its increasing use both for hedging and speculative purposes, the contract did not remain with the original buyer till maturity but was sold and resold passing through a number of hands before the date of delivery. A speculative trader as well as a hedger would ordinarily buy different quantities at one price and sell at another with the idea of making profit or protecting his spot transactions. Each of the parties who held the contract for a while during the period of its currency would be due either to pay or receive the difference meaning that he had lost or gained on the whole. But none of these differences would be payable until the expiry of the period to which the contract referred. It was therefore considered a lengthy, tedious and unsatisfactory process. It would at times tend to make the situation dangerous, because, an operator dealing in futures might carry on for a number of months losing heavily without being detected. On the due date, he might be unable to pay the difference or accept delivery as the final settlement. Hence, some method for the settlement of the balances of profit and loss involved in the myriad of transactions became necessary.

Methods of Clearing: In view of this, different methods of clearing a futures contract were devised and practised before the establishment of a common clearing house was conceived of. Traders were accustomed to settle their transactions either by directly matching them with one another or by ringing them out.

(a) **Direct Settlement:** Possibly the first system of clearing used was known as a 'Direct Settlement', meaning thereby the settling off of contracts to buy at a certain price at a certain time, against similar contracts to sell at the same or any other time, at the same or a varying price, and paying the difference in cash at the end. This kind of settlement would occur when each of two members

had purchased from and sold the same contract to the other. For instance, let us assume that on September 5th, A sold to B May contract for 100 bales at Rs. 400/- per candy and after some time, say, on September 10th, B sold to A the same contract at Rs. 425/-. Instead of waiting till maturity and then delivering cotton to each other they would settle directly on or after their contracts had been closed. In the above case, this would occur on the 10th of September, when by paying and receiving the difference of Rs. 25/- per candy A and B would settle their transactions. It helped them to delete the dead account from their books and avoid making or taking deliveries to each other. A pre-requisite of a direct settlement was that A must have bought and sold a futures contract for the same period to B and B in turn must have made counter transactions of the same contract with A. Direct settlement could also be effected in cases where quantity purchased or sold varied. A great drawback of this method was found in its restrictive nature in the sense that only two parties could make use of it.

(b) **Pass-out or transfer:** Another method employed for making settlements was commonly known as "Pass-out or transfer." A pass-out was the substitution of another contract for the original one. This was also known as 'offset'. The original seller might purchase at any price, before final delivery, a similar contract from another and substitute such purchased contract for his original sale, e.g. by this method A could pass out or transfer what he bought from B and sold to C. Since A had both bought and sold, he need not wait longer for effecting a settlement provided he could arrange and make it mutually agreeable to B and C. Under this method, it did not matter if the prices between A, B and C did not coincide, because A could pay off or receive the difference in cash by adjusting the original prices or taking some common basis. This would save a lot of time of all concerned. But the method was found restrictive in its scope by way of limiting the number of parties that could mutually agree and adjust. In this method, difficulty would arise in a case when B might not accept C for reasons best known to him, and A could not fall out. So another plan of settling contracts was devised.

(c) **Ring Settlement:** An improved method was found in what was known as a 'ring settlement'. Ring settlement was reached by comparing books of the members buying and selling in the ring. A series of transactions were picked out which could be set against each other so that closed contracts might be eliminated. This system operated on the same principle as the direct settlement, except that it took more than two parties to make a ring. If A, B and C were brought together and transactions reduced to some common price basis, each could pay the other the difference between the ring price¹ and the original trading price. For instance,

¹ "The price for 'ring' was 10.30 a.m. price as published by the exchange and printed on the tape every day" W. H. Hubbard: Cotton and the Cotton Market: p.263.

if A had sold to B, B to C, C to D, D to E, E to F and F to A and the facts were known, transactions could be cancelled and differences paid as shown in the following statement:—

Purchase	A	Sale
From F at Rs. 400: 100 bales To be claimed Rs. 250		To B at Rs. 405: 100 bales
	B	
From A at Rs. 405: 100 bales		To C at Rs. 403: 100 bales To be paid Rs. 100
	C	
From B at Rs. 403: 100 bales To be claimed Rs. 350		To D at Rs. 410: 100 bales
	D	
From C at Rs. 410: 100 bales		To E at Rs. 406: 100 bales To be paid Rs. 200
	E	
From D at Rs. 406: 100 bales		To F at Rs. 406: 100 bales
	F	
From E at Rs. 406: 100 bales		To A at Rs. 400: 100 bales To be paid Rs. 300.

From the above table it will be noticed that under any circumstances, the losses would equal gains when the accounts of all the members of a ring are considered. Thus, the method of clearing contracts which could not be offset by direct settlement or pass-out was accomplished through the formation of a ring. What the ring settlement system implied was that those having net losses should pay to those having net profits. The ring might contain a large number of dealers, and balances might be settled by means of a few payments involving small amounts. In this way a number of transactions could be cleared. It gave some advantages over the direct or pass-out method of settlement in the sense that a number of traders could wipe out their dead accounts long before maturity of the futures contract. In addition to this, they could effect an enormous saving in the financial requirements of a particular party which might otherwise be needed to settle the transactions. However, the method was not free from shortcomings. The principal limitations to the ring settlement system were: (1) the proportion of contracts liquidated by this method was small compared to the volume of outstanding contracts. (2) The quantity which could be rung out was limited by the smallest amount bought and sold by any party in the ring. (3) The last buyer must have sold to none but the first seller to complete the ring. (4) The process of determining the presence of a ring was not an easy task. If one of the parties to a ring was absent, it would be difficult to

settlements, at least weekly.⁹ Accordingly a complete system of a clearing house was introduced in 1918, that is, 43 years after the starting in 1875 of the first association to regulate the cotton trade of Bombay.

Karachi: There was no clearing house in Karachi and the trade followed the old methods of settlement.¹⁰ It was only during 1929, that the Karachi joint cotton committee undertook to clear the delivery orders on behalf of members. The committee then considered a proposal for undertaking clearing of payments arising out of periodical settlement of contracts on the same lines as in Bombay. In 1930, they took steps towards the introduction of periodical settlements.¹¹ Still they have no complete system of a modern clearing house. In 1933, they established a modern clearing house which functions at present under the auspices of the Karachi Cotton Association.

The position in the rest of the Indian Cotton futures markets is that though their Articles of Association provide for the establishment of a clearing house, at present none of them has one. They follow old methods of clearing. A system of periodical settlement is officially recognised by the respective bodies. They settle their contracts on every Monday at the price fixed by the committee on the preceding Saturday and pay or receive the differences. This presents a very interesting scene to witness. They form the rings and ring out their transactions first by checking each other's list, then by paying or receiving differences. For this purpose, they have to accommodate by keeping cash on hand or giving a bearer's cheque on any first class bank for all the debit items though it may be that they have to receive a certain sum from someone and pay a certain amount to someone else. The authorities in case of default do what they can for the loss, if any, sustained by the member.

3. CLEARING HOUSE

Instead of forming rings or making direct settlements all transactions in the leading markets of the world are now passed through the clearing house as an intermediary. Members no longer deal directly with one another after the transactions across the ring have been made and contract slips exchanged or confirmed. Instead, they deal with the clearing house.

Its Importance: Since the leading futures markets have grown to huge dimensions and products are sold again and again, they have introduced a complete machinery of a clearing house through which purchases and sales by the members are cancelled against one another as far as possible and only differences are paid and

⁹ Report of the Indian Cotton Committee, 1919, p.210

¹⁰ "The settlement rules were fixed by the Panchayat"—Personal investigation.

¹¹ Report of the Karachi Joint Cotton Committee for the periods 1927-31.

received or deliveries effected. Without a clearing house, it is impossible to carry out such a large number of transactions. It acts as a central clearing agency for members and becomes a central office where each member can settle his transactions and clear the differences caused by changes in prices. With regard to utility and economic importance, it may be said that the adoption is a proof of its use. Its utility to the trade lies in saving time, trouble, and energy as well as limiting the risks. Today, a clearing house is regarded as the hub of financial dealings between members.¹² Debits or credits due to and from many parties are paid or received from the clearing house by a member. All members deal likewise with this institution and the net result is that each firm settles its differences with the other separately for many small balances. Its real importance lies in the convenience it gives in facilitating the handling of the immense volume of transactions on the exchange and in securing to the trade an efficient, economical and safe method of keeping all futures contracts cleared.

Purpose: In order to facilitate the settlement of contracts, simplify the passing over of delivery and lessen the financial risks, a clearing house has been established. It also affords facilities for the offset of transactions and settling of differences. For this purpose, it has been provided that all clearing members would file their reports or statements showing the net long or short position with the clearing house which has a right to refuse or accept any contract for clearance. Upon acceptance, all contracts made between members are deemed to have been assumed by the clearing house and its position becomes that of a seller to every buyer and a buyer to every seller.

Position: A clearing house is technically a part of the exchange but for practical purposes it is a separate and in most cases, an independent organisation. In cases where it is not independent, it functions in conjunction with the exchange as a distinct entity. Since it is organised by the members of the exchanges for their use only, it is composed exclusively of these people who are known as clearing members. The transactions which the non-clearing house members made are cleared for them at a small charge by a clearing house member. The provisions of the bye-laws of the clearing house are for the use and purpose of only its members against one another and none of them provides anything that would recognise the responsibility of the clearing house to non-

¹² A cotton clearing house is often compared with a bank clearing house. But there is a fundamental difference between the two which may be noted and appreciated here. In the latter case, what is involved is the ownership of money, the value of which remains usually fixed. Hence, only the balance is payable to each member bank whereas, in the former case, its operation is complicated by the fact that clearings involve transfer of ownership of contracts of fluctuating values and upon the acceptance by the clearing house of transactions in futures the identity of the original buyer or seller is lost.

members. The position of a non-member is precarious, since he has no protection against loss through the failure of his own agent. As the clearing house does not provide for the customers' protection, the probable remedy for them is to make the selection of a financially sound agent to safeguard their interests.

An important question may be asked at this point, namely, what assurance does the clearing house give that its member will always make good on the excess or open contracts which are not cancelled on a particular settlement? Such contracts remain open until opposite transactions are made or delivery effected. Since contracts often remain open for a number of days, weeks and even months, it is possible to have wide fluctuations which might offset the solvency of an agent. To safeguard against such a contingency, most of the American clearing houses insist on the provision of an adequate protection.¹³ The purpose is that the assigned or pledged property acts as a guarantee for the performance of the contracts of the broker. Secondly, an elaborate system of margins is used, not only for the sake of protection but also to facilitate cancellation of transactions made for the same delivery period. There is nothing of this kind in our country. Consequently, when there are wide fluctuations, the operators have to bear the burden. For example, at the outbreak of the War in September, 1939, prices jumped so suddenly that many big parties could not meet liabilities and had to settle accounts mutually.¹⁴ It therefore follows that the introduction of a deposit system with a view to ensuring payments by members on account of liabilities resulting from wide fluctuations is long overdue and badly needed by the trade. Secondly the adoption of the margin system should also go a long way in improving the situation.

Management: A clearing house is under the management of a committee named "the clearing house committee". In the case of Bombay, it is composed of at least five members. The clearing house has its own set of officials and regulations. But the point is whether the clearing house committee should be appointed by the Board or elected annually by the general body in accordance with the rules. In Liverpool, this committee is annually elected by the general body while in Bombay it is appointed by the Board. In Liverpool, the general body enjoys the real powers while in Bombay the Board is solely responsible for its management and the general body is made subordinate to the Board. In the latter case, the Board has some scope for mischief in connection with the work of the clearing house. Personal influence might play its part and

13 Ref. to Rules and Bye-laws of the New York and New Orleans Cotton Exchanges.

14 "The market heaved a sigh of relief at night when it learnt that the settlement had passed off smoothly. The total amount paid by bears on account of the settlement is estimated to be in the neighbourhood of Rs. 80,00,000 out of which Rs. 20,00,000 is believed to have been paid by one party alone, while three parties settled their creditors." *The Times of India*: 16th September 1939.

tend to be far from fair and just. In Liverpool, this committee is entrusted with the powers to make regulations for the carrying out of the purposes for which the clearing house is maintained. In Bombay this power of making regulations rests with the Board and the committee is responsible for the management of and the decisions (subject to the right of appeal to the Board) of disputes arising out of its working. Thus, in the former case, the committee has vast powers while in the latter, it has none. In view of this, it seems desirable that the committee in Bombay should be annually elected by the general body and not by the Board. The members will then like to be honest and just without being afraid of the Board or seeking any favour from the Directors.

4. FUNCTIONS OF A CLEARING HOUSE.

A modern clearing house performs the following principal functions: (1) To assume the liability or rights as against each member on all open contracts by substituting the clearing house as the seller of all bought contracts and the buyer of all sold contracts. (2) To clear money values of differences. (3) To clear the contracts. (4) To keep a record of all the registered contracts. (5) To fix settlement prices. (6) To fix, in the case of periodical settlements, settlement dates, etc. (7) To supervise and direct the making of deliveries. (8) To guarantee, in a measure, against loss. (9) To see that each member maintains the proper margin deposits and (10) to pay the Government taxes on futures transactions. In America, the last two functions are a matter of administrative convenience. In India, the dues to the association from the members are received and any claims or liabilities of members in each other in respect of cotton business are also adjusted by the clearing house. In Liverpool, the clearing house performs all work connected with the cotton transactions. The remaining functions from 1 to 7 may conveniently be divided into two groups: (a) To clear monetary differences on closed transactions and (b) to clear actual cotton tendered, passing through several parties.

(a) **Settlement Terms:** So far as the settlement terms are concerned, they refer to what are generally called 'settlement prices' and 'settlement days'. This appears to be the most important of all the functions of a clearing house. Under the system of settlement terms all that is at stake between the parties to a contract is the difference which the prices of futures may show in the settlement period; whereas, under the system of settlement only by delivery, the whole difference in price arising between the price of futures and its ringing out is at stake. Settlement terms then are periodic tests of the solvency of the operators, who deal in futures contracts. They afford a guarantee that bankruptcy shall be discovered before deficits have become dangerously large. For instance, the figures of Bombay business are estimated approxi-

mately at Rs. 2 crores.¹⁵ This figure gives an idea of the dimensions of trade in Bombay and the importance of the settlement terms.

The next point is the question of period for which settlement should be deferred. It is effected daily, weekly and even fortnightly. On the American cotton exchanges, daily settlements are effected. In Liverpool, at first, they provided for fortnightly settlement but afterwards resorted to weekly which is now customary between members. In India, Bombay and Karachi used to have fortnightly settlements. Under weekly or fortnightly settlement, all outstanding contracts are reduced to weekly or fortnightly settlement prices and the differences are paid or received every week or fortnight. The settlement prices are struck by the committees at 1 p.m. of each settlement day in Bombay.¹⁶ The decisions of the committee or Board fixing the settlement prices are not open to question. Only the net long or short contracts for delivery in each are carried forward at the settlement prices. All other contracts are deemed to be closed and must be rung out. Under the settlement terms each settlement on behalf of an individual member cannot affect those contracts in which delivery is contemplated by either party and it is in this connection that the clearing house performs one of its most important functions. The object of this daily, weekly or fortnightly settlement is obviously to limit the risk of both buyer and seller to the limits of a day, week or two weeks' fluctuations. Whatever is paid or received now by way of daily, weekly or fortnightly settlement is to be adjusted at the end of the life of a contract. Thus, the general principle underlying the system of clearing is one of partial payment pending final delivery and final settling up.

Weekly Settlement in Bombay: A sense of general fear prevailed in the trade throughout the cotton year 1939-40 that the fortnightly settlement clearings would not go through smoothly during the critical period of rapid and wide fluctuations. To give only one example, the fortnightly settlement clearing of January 29, 1940 involved an amount of Rs 1,97,40,157. This of course was cleared without any disturbance establishing thereby an all-time record since 1918.¹⁷ But it strained the mind of traders to a great extent. Hence, the members of the E.I.C.A. requested the Board to shorten the length of time of the settlement. The Board in their turn resolved with a view to afford better security to the trade to introduce a system of weekly settlement since September

15 The amount cleared on 30th November 1924 amounted to a crore and eighty eight lakhs of rupees the highest on record in Bombay. Pamphlet issued by the E.I.C.A. March 1938.

16 In Bombay and Karachi there are in annual calendar showing the days of settlement and other necessary particulars.

17 It is interesting to note here in passing that an all time record of Delivery Orders on any one day was reached on May, 7, 1941, when 1255 Delivery Orders were issued against the Brown Cotton and Brazil hedge contracts as against 921 Delivery orders issued on Sept. 1, 1922.

1940 in place of the then existing system of fortnightly settlement. The clearing of differences at intervals of every week was a pressing need in the interest of the trade. The ideal to be aimed at however is the system of 'daily settlement,' since one cannot expect to trade safely in 'futures' and accumulate differences over a longer period of time than 24 hours.

With regard to the period of settlement, it is argued that the daily settlement system is not at all adapted to the needs of the Bombay and Karachi markets with their (i) system of brokers and jobbers and (ii) members' habit of doing business generally on credit and not on cash terms. Moreover, their respective associations have got rules providing for abnormal situations or strange circumstances. They, therefore, do not favour daily settlement. On the other hand, it is pointed out that the American system of daily settlement as contrasted with the postponement of settlement for a week under the Karachi or Bombay systems, serves as a precautionary restriction upon members against incurring excessive liability. Balancing these arguments against each other, we find that the daily settlement system is highly desirable in view of the risk and amount involved in trading upon the futures markets.

Some of the members of the E.I.C.A. are of the opinion that there is a big difference between the circumstances current in New York and those in Bombay.¹⁸ It may however be stated that there can hardly be any sort of difference in the circumstances between these two markets in face of the fact that the risk and amounts involved in trading upon a futures market which may be either Bombay or New York or any such big and important market are of the same magnitude. Hence, we are led to conclude that the sooner our market shortens the period of settlement the better for the trade in general.

(b) **Settlement by deliveries:** With regard to deliveries of cotton, etc., there are various ways of doing this on an organised market. It may be recalled that most of the futures contracts are settled without actual delivery of spot cotton. It is very easy to transfer obligations on futures by offset, so that delivery will most probably be made to a different buyer from the one upon whose order a contract was originally executed. It is in connection with deliveries that the clearing house performs its other important function. It brings together the first seller and the last buyer by eliminating the intermediaries connected with one another by a number of contracts.

Transferable Notice: One of the delivery methods of settling a contract and clearing the accounts is known as 'settlement by passing of transferable notices.' The transferable notice is a form issued by a member who wishes to make delivery of cotton there-

¹⁸ Personal interviews.

on. When a clearing house receives it, it ascertains from its books the names of the parties who have bought that particular position of a futures contract and passes the same among them. A member who does not intend to take delivery of cotton will, as soon as the notice is received, sell the contract and immediately deliver it to the buyer. The purpose of this notice is two-fold: (a) To serve notice upon the buyer that the seller is ready to make delivery upon his contract and (b) to use it in place of Railway or Warehouse receipts in the settlement of outstanding contracts. It may clear a score of outstanding transactions and is ultimately placed in the hands of a buyer who has not sold. A member who is long or has bought a contract may settle it without receiving cotton even after the receipt of the notice of delivery. In order to make more effective the transferability of obligations under futures contracts, the notice of delivery is also made transferable. In this way passing of a delivery notice forms a basis of contract settlement similar to that involved in the ring settlement or the process of clearing.

Delivery: In spite of the existence of all these methods, if a man wants to deliver or receive cotton against a futures contract, he has every right to do so. This, when effected, is known as the 'delivery method of settlement'. Under it, a futures contract is settled by actually tendering and receiving cotton. Of course, the parties making or taking delivery will be the original seller and the last buyer. The original purchaser and all other intermediaries will be dropped out. When actual delivery takes place, the notice in its statement of conditions of settlement does not name the price stipulated in the original contract. It names the settlement price which is fixed by the clearing house committee and final payment is made at a price varying by grade and staple in accordance with the prevailing system of differences. The settlement price is merely used as a convenience pending final adjustments at the end of deliveries. The total amount paid and received for the cotton delivered equals the amount stipulated in the original contract. The seller receives the original contract price, partly in the form of final price at which cotton is billed on delivery and partly in differences received or paid in clearings. The buyer likewise pays an equivalent of his original contract price in the form of the final settlement price plus or minus previous settlements. In the same way, a client making or taking delivery, pays or receives the specified original contract price. If his transactions went against him he has paid losses largely prior to the date of delivery. When payment is received by the seller and the cotton delivered to the buyer, the contract is said to be closed. Rules regarding delivery must be observed otherwise, the party will be liable to penalty.

Position of a Non-Member: Since contracts can only be held between members who are liable to each other for all payments of differences due, non-members have no concern whatsoever with the clearing house. The position of a member therefore is a dual

one, i.e. he is a principal to the clearing house and an agent to the customers. A non-member buying or selling through a member and wishing to get out of the market has only to ask his agent to enter into an opposite transaction of an equal amount of the same contract. When this is done, the agent renders the customer a statement showing the number of contracts bought and sold, the prices, the commission and the resultant gain or loss. The client deals only with his agent and his position therefore is determined entirely by himself. The member, on the other hand, deals with many other members and probably for several clients, some of whom may be long and some short of the market. The agent is liable to his clients to the extent of making sure that each member carries out his obligations. He is also personally responsible for making good to a client any loss caused by the failure of other clients or members. It is, therefore, of paramount importance that a non-member should offset his closed contracts and settle the differences as often as he can with the agent. The clearing member occasionally inquires of his customer whether he wants to settle the contracts or carry them forward. When the maturity date approaches, he requests the client for instructions regarding liquidation of holdings of the near month. In the absence of such instructions he reserves the right either to liquidate long contracts or to accept actual delivery at the account and risk of the client. Opposite is the case with regard to short contracts, i.e. the client has to give definite instructions on the day before the last trading day.

5. CLEARING PROCESS

The actual clearing process followed on the Indian markets particularly on the East India Cotton Association and the Karachi Cotton Association, both from the point of view of a member and a clearing house is described below.¹⁹ The day on which members submit their balance sheets to the clearing house is known as the 'Settlement Day', and the rate fixed on the clearing date is known as 'Settlement Rate'. First of all, members calculate the difference between the contract price and the settlement rate. They then exchange 'statements' and compare each other's accounts so that no error may be left. This is done not later than 12 noon on the day immediately preceding settlement day. Members hand over 'vouchers' showing the sums claimed to the parties from whom money is due on settlement. Such a voucher is an authoritative document in the nature of a cheque drawn on the clearing house which is presented by the receiver to the clearing house. The voucher received for sums to be claimed accompany the 'Balance Sheet' which is prepared and sent to the clearing house at the hour fixed by the Board on a settlement day.²⁰ A member whose balance sheet shows a debit balance pays into 'S' accounts with the Impe-

19 The description is based on the bye-laws relating to the clearing house of the respective bodies.

20 Member handing, in after the hour so fixed is charged late fee at the rate of rupee one per hour.

rial Bank of India, the amount due from him. A member whose balance sheet shows a credit balance is paid on the next day the sum due to him by the clearing house. In preparing these accounts, interest is allowed up to the due date of delivery at the rate of $4\frac{1}{2}\%$ per annum calculated on the aggregate sum²¹ due on each contract. A member who for any reason fails to pay the difference when due, is treated as having failed to meet his liabilities. The Board on receipt of such a report investigates the circumstances of the case and if it finds the failure proved, the member is suspended from all rights of membership. Any member who has thus failed may be re-instated at the option of the Board if it finds that the party has subsequently made an honourable settlement with his creditors.

The clearing house after receiving all balance sheets and vouchers verifies their accuracy by means of a running number. All items (credit and debit) showing the total amount and the number of bales are checked. For every mistake reported, the party has to pay a fine of rupee one. The balance sheets are alphabetically arranged in two groups showing (1) all debit accounts and (2) all credit accounts. Finally, a settlement is made showing grand totals for both sides. In the case of default on the part of a member the Board fixes the clearing rate to close his outstanding contracts and the accounts are adjusted accordingly. Thus, the parties are made to suffer the least.

Actual delivery takes place during the delivery month. The delivery days are known as 'Tender days'. On these days, members have to send a complete list of their outstanding contracts to the clearing house for information. This list is called the 'Instruction form'. Contracts entered therein are in units of 50 bales. This form is in the nature of a balance sheet and shows the member's standing business. If the business is square, he has no need to receive or tender cotton. Any member desiring to tender cotton against a contract has to send particulars on an 'official delivery order form'.²² The name of the last buyer is ascertained by the clearing house and entered in the form. It gives such tender a registered number and enters in the delivery order the difference in value between the standard basis of the contract and the particular description of cotton tendered. The delivery order received from the first seller is then passed by the clearing house and when this has been completed, it hands over to the buyer whose name appears to be the last thereon and who is known as a 'last buyer'. The order is stamped with the official stamp and is known as the

21 To facilitate payments, pice and annas are eliminated, i.e. a sum less than 8 annas is ignored while 8 annas and more are treated as a rupee.

22 This form specifies (a) The contract price or the settlement price, if any, (b) The marks and descriptions of the cotton to be tendered, (c) The standard under which it is to be surveyed, (d) The jatha or the godown in which the cotton is lying at the time, (e) The date of declaration and (f) The names of the seller and his intermediate buyer.

'Pakka Delivery Order'. A tender fee of annas eight is charged for every tender passed on in this manner. The last buyer makes necessary arrangements with regard to sampling, arbitration and weighing. He is usually not permitted to re-tender the delivery order received. For the purposes of adjusting accounts between intermediate parties the standard weight of a bale is taken as $3\frac{1}{2}$ cwts. net or 392 lbs. If the last buyer is posted as the defaulter, his immediate seller becomes the last buyer with all obligations. No withdrawal of any tender under a futures contract is allowed. If a seller fails to tender, the buyer 'invoices the contract back'²³ at the spot rate of cotton contracted for plus a minimum penalty of Rs. 25 ' per candy of 784 lbs. or actually buys.

6. ADVANTAGES AND OBJECTIONS

Advantages of a Clearing House: The development of clearing houses on different exchanges has greatly simplified the work of handling contracts and added to the safety of futures. Undoubtedly, a clearing organisation facilitates settlement of monetary differences and clears the contracts by ultimately passing over the actual delivery to the last buyer. In addition to this, it effects economies in volume and amounts of cheques and drafts. A member has to pay only the net balance of money instead of first paying in full his debit and subsequently receiving credits. A modern complete system of a clearing house is far in advance of those mutual and voluntary clearances. It saves and limits risks. It acts as a bank and serves as a safeguard to the trade. It rapidly brings different parties together and at once detects a weak one. It clears all business passed between members in a short time at less expense by assuming the position of a seller to a buyer and vice versa. A member has not to go in search of the other party. Business is carried on most expeditiously, economically and safely through the agency of the clearing house. It affords all facilities for off-setting and settling immediate differences on closed contracts and safeguards the interests of members against each other. It is designed for the convenient, quick and economic handling of transactions. In short, without such a system, futures trading cannot be maintained beyond a small fraction of its present proportions.

Objections Against a Clearing House: At times, complaints are received against the system. It is said that the clearing house is entirely responsible for the various troubles that now-a-days crop up on the futures markets.²⁴ Speculation has increased to a considerable extent since its inception, and weak traders can easily operate on limited capital. It does not offer any protection to the

23 The expression 'invoice back' means that when a tender is rejected by the buyer, he instead of buying on account of the seller accepts the spot rate of the day and pays or receives the difference between the spot rate and the rate given in the delivery order.

24 Personal interviews,

customer. Further, it does not extend credit to any member, while under the old systems, mutual financial arrangements could be made. In those days the parties knew each other and could secure credit from friends and those having confidence in the financial strength of the debtor. The old methods were simple and not intricate as those of the present day.

Conclusion: In conclusion, it can be said that the advantages gained in efficiency and fairness far outweigh the objections raised. It may be admitted that the old systems gave credit, but it cannot be ignored that the present one effects a considerable saving in banking accommodation and in the use of credit. No doubt, the system offers facilities for speculation as distinct from dealing in actual cotton, but it has to be borne in mind that it checks wild gambling by weak dealers²⁵ who were dangerous to the cotton market before the present system of clearing house was introduced

²⁵ Statement (supplied by the clearing house, FIC A.) showing the number of defaulters and the amount involved since the introduction of the clearing house

Year	No. of Defaulters	Amount of Default Rs (000)	Year	No. of Defaulter	Amount of Default Rs (000)
1918-19	1	not available	1930-31	1	11.8
1919-20	10		1931-32	1	10.3
1920-21	9		1932-33	—	—
1921-22	2		1933-34	1	5.2
1922-23	16	1390.9	1934-35	1	24.5
1923-24	2	20.1	1935-36	1	3.3
1924-25	2	7.1	1936-37	—	—
1925-26	2	17.6	1937-38	1	94.2
1926-27	3	190.0	1938-39	—	—
1927-28	4	935.2	1939-40	1	97.2
1928-29	3	68.2	1940-41	—	—
1929-30	5	212.8			

PART II
SERVICES OF
FUTURES TRADING AND MARKETS;
AND THEIR REGULATION.

CHAPTER VII

HEDGING: PRINCIPLES AND PRACTICE

ONE of the chief functions of a futures market is to provide facilities to shift risks incidental to our roundabout methods of production and distribution. Cotton dealers buy during one season of the year and sell during the other. During this interval of time large changes in the level of prices frequently take place. It is with a view to avoiding the risk involved in these changes that a futures market is mostly availed of. The degree of protection, however, depends on the amount and proportion of losses that may be offset by the use of futures as a hedge. We propose to deal in the first place with the principles and practice of hedging in this chapter and then to examine some of the special problems of hedging in India in the following two chapters.

1. THEORY OF HEDGING

A trader buys in the producer's market and sells in the consumer's. His object is to secure the profit arising from differences prevailing between two market prices. This difference, under normal circumstances remains constant and constitutes a reward for the services of middlemen.

Definition: Hedging is a method employed by various interests dealing in an actual commodity such as, growers, dealers, merchants, importers, exporters, factory-owners and spinners, to protect themselves against losses which might result from price fluctuations. For instance, suppose a grower in India who hopes to get in March or April 50 bales of actual cotton from his field, sales 50 bales on the Bombay futures market. This transaction is a sort of covering one which is commonly known in the cotton trade as 'hedging' against his anticipated produce. Similarly, when a mill has got unsold yarn or cloth, and it sells equal quantity in a futures market to avoid risk of price fluctuations it will be called a hedging operation. Thus the term 'hedging' denotes activity in a futures market by the dealers in spot market to protect themselves against price changes. The word 'hedging' may then be defined as a purchase or sale for future delivery intended to offset and thereby protect a transaction in spot, e.g. suppose an Indian shipper who has bought cotton in mofussil in March, sells May futures contract to approximately the same amount, and if the price falls in the month of April he will lose from this decline on his spot transaction, but his loss will be offset to a major extent by his sales of the futures contract which has also now gone down. A hedge transaction is therefore a simultaneous purchase and sale in two markets—spot and futures—which are expected to behave in such

a way that any loss realised in one may be offset by an equivalent gain in the other.¹

The principle of hedging is based on the idea that there is an existing risk due to unexpected price movements ultimately resulting in a loss on a spot deal. Such risk is offset or hedged by setting up another transaction in a futures market in the opposite direction. This subsequent operation is nothing but a counterpart of the first already made in a spot market and the risk that exists in the actual handling of the commodity is thus covered or hedged. For instance, when our merchants buy 100 bales of ready cotton either in an upcountry or a spot market they sell an equal amount on the Bombay futures market,² and when they dispose of the 100 bales as a spot sale they buy back the same amount of futures. Similarly, a spinner may purchase futures concurrently with the sale of goods or he may in the same manner sell futures with the purchase of cotton. A dealer thus makes two equal and opposite transactions in two different markets, using a spot market for merchandising purposes and a futures one for hedging.

Assumption of a Normal Spread: Hedging is done on the assumption that prices of spot and futures contracts will move up and down together. There is some relationship between the prices of spot and futures contracts resulting from the individual situations in the two markets and it is known as a 'Normal Spread' between spot and futures prices. Every hedger either in India or abroad has to take this normal spread into account and base his operations accordingly. It is also assumed that as the transactions are in the opposite sides of the market, the decline or advance of one will be compensated by a corresponding fluctuation in the other. Hedging thus assumes the existence of a nearly parallel movement in spot and futures prices. If such behaviour follows, a perfect hedge has been effected. But such is not the case. The degree to which this safeguard applies is limited. In fact, there always occurs some difference in their movements.

In so far as the major price movement is concerned this assumption may however be taken as substantially accurate because spot and futures prices are governed by the same broad factors of supply and demand. Interdependent as these prices are, under normal conditions, they tend to move together. A rise in prices of spot cotton in relation to those of futures by an amount equal to the

1 Cf. "Hedging may be defined as the practice of making two contracts at about the same time of an opposite corresponding nature, the one in the actual trade and the other in the speculative market." S. S. Hubbard: *The Stock Market*, 1934 p. 62.

2 There are two types of hedging transactions (a) hedging sale and (b) hedging purchase. When cotton is bought in upcountry an equivalent sale of futures is made; the transaction is called a hedging sale. Similarly, when spot cotton or cotton goods is sold in advance and an equivalent purchase of futures is made; the transaction is called a hedging purchase.

cost of carrying spot cotton is normally expected. The question is whether the normal relationship or normal spread between the two prices is maintained throughout till the hedging operation is accomplished. Changes in the relative supply and demand situations in the two markets bring about irregular variations in their normal spread. Perfect protection is only provided when the prices of different qualities of cotton move parallel to the price of the basic grade adopted for futures contract. If they do not, the hedger is still subject, in a minor degree, to the risks of price movements. For instance, if a spinner in India wishes to guarantee himself the supply of the Punjab 'American cotton for future delivery, he will buy the futures contract as a hedge, but if the price of the Punjab/American cotton rises to a greater degree than that of the futures, his loss will then consist of the extent to which the prices of the two types of cotton have got out of 'normal spread' or line. The fact that this normal relationship may not prevail adds an element of risk to hedging operations. If the spot and futures markets were always moving together or if the price relationship between the different grades of cotton remained constant hedging would be an operation giving highly desirable results. The hedge under the prevalence of normal spread, of course, tends to eliminate speculative losses arising from variations in major movements or general level of cotton prices, and leave commercial returns more or less untouched. It is certain that on an average, during a single season this relationship remains sufficiently constant to make hedging of great value, for, the spot and future prices do move together with considerable regularity. But when the normal spread is disturbed the protection offered by hedging becomes imperfect. Not only the normal relationship between spot and futures prices

Table ' showing monthly average of prices of Hedge Contracts and Spot Rate 1938-39 (in Rs. per candy of 184 lbs.)

MONTH	BENGAL		BROACH		SOMRA	
	Hedge Cont Dec. Jan.	Spot Hk Y G Bengal	Hedge Cont April May	Spot Hk Y G Broach	Hedge Cont Dec. Jan.	Spot Hk Y G Soma
1938	1939		1939		1939	
Sept	117		151	142	137	
Oct	117		151		136	
Nov	119	121	155		131	150
Dec	111	124	155		136	150
1939						
Jan	111	125	157		136	147
Feb		118	151	151		141
Mar		119	151	155		143
	1940		1940		1940	
April	111	116	150	155	135	141
May	118	121	151	168	131	160
June	120	126	159	170	135	160
July	117	125	153	155	131	151
August	120	125	155	160	136	151

Compiled from the Bombay Cotton Annual

alters, but the price relationship between grades of cotton also undergoes a vast change between the time when the hedge is placed and the time when it is lifted up. The reasons explaining the occurrence of a disturbance in the normal spread will be set forth in the following section. It is sufficient to note at present that if any definite spread or price relationship between the markets appears with great frequency and permanence, the hedger is relatively safe in assuming that the two prices will fluctuate in unison and may operate with confidence.

Benefits: Hedging is practised for two main advantages: (1) to secure an insurance against price hazards and (2) to facilitate the financing of market operations. It goes without saying that if protection against an adverse movement of prices is to be secured, it cannot be obtained without giving up the profit likely to result from a favourable movement. In other words, the hedger foregoes the chance of gain through price fluctuations in his favour in order to insure himself against loss when such movements go against him. The possibility of having to forego speculative profit in this way is to be regarded as a premium on an insurance secured through a hedge which guarantees the hedger against speculative loss. The difference between a trader who follows the policy of hedging and the one who does not, is that the former gets a comparatively smaller but more certain profit while the latter's profit though larger is more uncertain. Again, the amount of credit which a trader can secure with a hedged commodity is relatively greater. When cotton is not hedged, the percentage of its value advanced by the bank of England is usually lower.⁴ The practice of banks and financiers in accepting cotton as collateral for loans varies in India. In private banking circles the percentages depend upon market conditions, but the proportions of 90-95% and 70-75% are fairly representative.⁵ A striking example of the value of hedging is furnished by the Federal Farm Board in granting loans to co-operative cotton marketing associations. These loans amount to 99% of the value of hedged cotton and not more than 75% for unhedged cotton.⁶ The combination of both these advantages results in the possibility of doing business on a much smaller margin of profit to the trader. Because of hedging, hedgers are able to put in a larger business with the same amount of capital. This means smaller cost per unit of a commodity handled. Through the force of competition the margin between the purchase and sale prices has been reduced in proportion to the lower handling charges. Hedging thus tends to make it possible to give the benefit of either lower prices to consumers or higher prices to producers

4 "Liverpool banks lent freely with a margin of only 5% against hedged commodities, but with a much wider margin against unhedged ones. Thus for unhedged cotton they might require a margin of 30%." Proceedings of the Washington Congress, 1931, p.35. International Chamber of Commerce.

5 Personal investigation.

6 Report of the Special committee of the Chamber of Commerce, U.S.A., 1930, p.24.

and at times, to both of them. It may therefore be said that hedging is of great benefit to the trade.

Dependence of Hedging of Speculation: On a futures market, every hedging operation involves two parties: (i) the dealer in spot cotton, i.e. the hedger himself and (ii) the dealer in futures, i.e. the opposite party. This second party is generally a speculator. It is the speculator, ready to buy or sell at any moment, who furnishes hedgers with the required party and assumes the risk. He may continue to carry a contract on either side as required by the trade. He, in his turn, sells to or buys from someone else and makes his profit or loss. This third party then carries forward the weight of the hedge. Thus, any particular position created by a hedger may be passed from party to party a score of times before its ultimate closing.

Hedging demands the existence of a constant market which is provided by the speculator. If there were no speculators, hedging interests would have been obliged to shoulder the risk themselves. Speculators sell as well as buy taking thereby a 'short' or selling and 'long' or buying positions in the market. This is essential particularly for hedgers whose operations require at one time a buyer and at the other a seller. Moreover, a hedging purchase seldom equals a hedging sale when a hedger wants to operate and vice versa. In the absence of speculators the position of hedgers would be that if in a given season there was an excess supply of hedging contracts from dealers over the number required, as hedging purchases by spinners, the price would be forced so low that manufacturers would be induced to contract in advance for their supplies of raw material. The load of the market will thus be taken by the spinners. Similarly, in the case of an excess demand for hedgers from industries and a consequent high price, prospective sellers might be induced to sell their contracts in advance. Such a development would mean that dealers and manufacturers bear the burden of the inevitable risk arising from their ordinary marketing transactions. Further, a futures market composed purely of hedgers will in all probability encounter considerable difficulty in timing the transaction and finding the required opposite party. In fact, the need of dealers, in actual cotton, who like to buy or sell hedges does neither coincide in time nor necessarily in volume. As a practical issue, there can therefore be no hedging without speculation. The existence of a hedging market thus presupposes the existence of a speculative market.

2. CONSIDERATION OF BASIS

In the preceding section we have noticed that the theory of hedging rests on the assumption of a 'normal spread' between spot and futures prices. This very assumption is the real source of its shortcomings. The fact is that the question of maintaining a normal price relationship or normal spread between the spot and futures

prices presents a baffling problem to hedgers, since, it resolves itself into a consideration of 'basis' which is a variable factor.

Meaning of the term 'Basis': The word 'basis' is a general expression applied in business usages to a number of closely related situations. Ordinarily, it is used in three different meanings: (1) the widening or narrowing of differences expressed technically as points 'on' and 'off' on one or more of the qualities determining class of cotton, (2) to designate the settlement grade in a futures contract from which 'ons' and 'offs' are reckoned and (3) to designate the relative values of spot and futures cotton. It may further be used as the 'buying basis' and 'selling basis'. The former refers to the amount bid or paid per unit over and under some specified terms, while the latter refers to the amount over or under the futures at which a sale of spot cotton is made or offered. The trade at times also speaks of an 'advancing basis' or a 'declining basis'. For instance, when the price of May contract on a given day in the Bombay market goes to, say, Rs. 470/- from Rs. 476 - but the price of Fine Machine-ginned Jarilla goes down to, say, Rs. 478 - from Rs. 480 - the basis on that day will be Rs. 8 -. This will be called the 'advancing basis' in comparison with the previous basis of Rs. 4 -. The reverse will be true in the case of the 'declining basis', e.g. on a given day the price of May futures contract may go up to Rs. 480 - when the price of the Jarilla cotton in the spot market may have advanced to Rs. 482 -. The basis in this case will be Rs. 2 - only and the trade will say that the basis is declining. Hence, 'basis' may be defined here:

"The word (basis) is usually used to designate the relationship between the price of spot cotton and of contracts for future delivery or the points on or off spot cotton compared with the price of futures contracts."⁷

Expressed alternatively, the term 'basis' means the difference or price relationship between the price of a futures contract and the spot price of the basic grade used in that futures contract. For instance, if the price of the May futures contract in the Bombay Market on a given day is quoted at Rs. 476/- and the price of Jarilla cotton (which is a basic grade for the futures contract) in the spot market is Rs. 480 -, the 'basis' will be Rs. 4 -. This will be expressed in the trade language as '4 on' and in the case of a spot quotation of Rs. 472 - for the same grade as '4 off' the futures contract.

Elements of Basis: A merchant or spinner who uses a futures market as a hedging medium never thinks in terms of price but always in that of 'basis'.⁸ Basis is a more important matter to a hedger than is the trend of prices. In fact, the latter is entirely

⁷ A. B. Cox: *Marketing American Cotton in England* 1928, p.57.

⁸ Trading in the Bombay and Karachi spot markets is done in terms of the basis rather than in those of absolute prices.

immaterial if the normal spread or 'basis' remains the same when the hedge is closed as when it was placed. It is the risk involved in basis that renders a hedge far from affording a complete means of insurance. There are various elements which go to make up the basis. These elements are: (i) premium, (ii) cost of delivery, (iii) business profit, (iv) manufacturing conditions, (v) crop conditions and (vi) market conditions. The first three may be said to form one group since they remain more or less constant and the other three to form another group since they, from their very nature, are changing.

Thus, in the consideration of the problem of basis, all these elements must be taken into account both individually and collectively.

Causes of Variations in Basis: It is generally known in the trade that, at times, spot cotton is worth more than futures; sometimes it is even and at other times, it is lower than futures. This difference between the prices of spot and futures may be made up of a number of factors. These factors may conveniently be divided into four groups, viz., (a) Interrelation of spot and futures prices, (b) Differences in place and date of delivery, (c) systems of fixing differences and (d) other factors.

(a) Interrelation of spot and futures prices: The principal group of factors causing variations in the basis arise from the interrelation of spot and futures prices. The important influence in causing spot to rise is the storage costs. Cotton stored into even-running lots commands a better price than the same amount of bales when unassembled. The carrying of cotton in storage involves expenses for warehousing, interest, insurance, deterioration and so forth. Most of these charges vary more or less directly with the length of the storage period. Hence, the premium in spot over futures should vary directly with the remoteness of the position of a futures contract traded in. This tendency refers to both the prices for the same crop. Similarly, the spot price normally rises relative to that of futures as the crop year advances. The premium of any given futures should vary directly within the same crop year with the difference in time between each spot trading month and the given position of a futures contract. The largest premium should appear for the remotest position and the smallest in the month of maturity, because, the carrying charges in the former are the greatest and in the latter the smallest. Discounts of futures under spots are to be commonly expected when a futures is for a new crop and a spot for an old one. Further, short crops tend to advance spot prices more rapidly than the futures. This advance is likely to affect the price of the near position of futures in comparison with that of the more distant ones. Large crops, on the other hand would depress spot prices in the early part of the marketing season. As a result, the price of the near positions of futures would go down as compared with that of the distant ones.

(b) **Differences in place and date of delivery, etc.:** Fluctuations in the basis are also largely accounted for by differences in place and date of delivery, in terms and conditions of sale as well as in the quality and classification of cotton. Prices of the same quality in various markets differ considerably and these differences are reflected in the basis. Prices of futures contracts in different markets for delivery during the same period may differ widely and result in a substantial difference in the basis. In the same way, differences in terms and conditions of sales affect the basis. One of the most important factors affecting the basis is the difference between the immediate and prospective demand and supply situation for cotton. Large supplies of spot cotton immediately available in a market may depress prices of spot in relation to those of futures, particularly for the more distant positions of a futures contract and vice versa. Price pegging or other forms of an organized control may result in a relative shortage of supplies of spot cotton immediately available in a market, so that prices of spot cotton may be high in relation to those of futures, particularly for the more distant positions, even when the total physical quantity of cotton in existence is relatively large. Prices of spot cotton may vary appreciably with the grade and staple length designations and these variations in prices are reflected in the basis. Spot prices for higher grades and long staples may be substantially higher than prices of futures contracts whereas at the same time and in the same market prices of lower grades and shorter staples may be materially lower than those of futures. These differences on the basis of grade and staple length vary with changes in the relative supply and demand situation for cotton of various qualities in a given market.

(c) **Systems of fixing differences:** Another important group of factors causing wide variations in Basis is the system of fixing differences between the basic grade of the futures contract and the range of other deliverable grades. The futures contract provides that any of a number of grades may be delivered at the option of the seller in fulfilment of a contract. These grades have a commercial value. Their relative prices in a spot market plus or minus the premium or discount for any given date determine which grade will be most profitable for the seller to deliver. At any given time, there is usually a particular grade which sellers may deliver to better advantage than others. The futures price will reflect that grade which at any given time is most profitable to deliver. This is easily seen from the buyer's point of view. He is aware that the seller has a right to choose any grade. He will, therefore, base his bid knowing that the seller will choose the cheapest grade. The futures price will reflect this "most likely deliverable" grade not only during the delivery period but for months in advance. This is the basic and permanent factor causing variations at all seasons of the year between the two markets. The extent of deviation is measured by the degree of variation occurring from time to time between the most likely deliverable grade and each of the other grades of cotton.

Generally speaking there are two systems for fixing differences: (i) the periodic or fixed difference system and (ii) the commercial difference system. As their names suggest, under the first system a schedule of price differentials is used subject to regular periodical revision. Under the second, instead of fixing the differentials in advance they are established daily and applied currently to deliveries. The first system operates on the theory that the established differentials should be kept in proximity to those prevailing in the spot markets and this can be done by an occasional adjustment. The plan gives greater emphasis to the possible delivery of grades other than the basic grade. One of the main limitations of this system lies in efforts made to estimate at the outset of the season what the prevailing commercial differentials will be for the whole period. Its other important limitation is the human element of bias and error in judgment. The second system eliminates any major adjustment between actual spot differences and those applied on futures contracts. This system is also not free from limitations. It is subject, as in the preceding case, to personal element. Daily differences 'on' and 'off' might well be arbitrarily altered either way. Moreover, daily adjustments of differentials continually create uncertainty in the minds of hedgers, regarding the true value of their hedges. While this limitation might be thought to be a small one because deliveries on futures are small, it is important in the sense that continual uncertainty is created whether delivery takes place or not.

A set of differences based essentially on spinning values has therefore been proposed by a section of the trade. The advocates of this plan believe it possible through scientific spinning tests to establish differences once for all and thus to eliminate a most vexed problem. The process suggested is that estimates of waste in each grade might be made after testing a large number of bales. These figures may then be reduced to percentages of basic grade. This will enable the trade to establish permanent differences for each grade. The plan overcomes the common limitation of human element. There is no doubt about the fact that the plan has a place in establishing commercial values but the percentage of yarn turned out is only one factor in determining differences. Other factors vary from mill to mill and from time to time, depending on a variety of causes. The laying out of machinery, the placing and training of labourers, the establishment of branded goods and other influences are the price-making factors independent of the yarn outturn. Further difficulty lies in the fact that the volume of cotton is not measured by its spinning contents alone, but the character of cotton, i.e. colour, strength, cleanliness, etc., is of material importance. Under the spinning difference system it is likely that longer staples would hardly be delivered and the quality would be poor. This would most certainly have a depressive and uncertain effect upon the price of the futures.

There is a wide variation in relative prices between the various grades. Relative price changes are occasioned mainly by corresponding changes in the demand for and supply of each grade produced every year. Any changes in relative prices are certain to cause loss to some hedgers. Hence, it is hoped that the difference system may be so adjusted as to prevent losses. This cannot, however, be the case so long as the cotton futures market permits delivery of a number of grades and classes, capable of wide variations in price in a spot market.

(d) **Other factors:** Other factors affecting the basis are: (i) the rate of consumption of particular grades and staples, (ii) differences between various grades and staples in the spot, (iii) changes in the volume of futures transactions,² (iv) squeezes or corners resulting from natural or artificial factors, (v) changes in exchange rates and in freight rates, (vi) variations in the condition and position of deliverable supplies, (vii) markets for spot cotton are widely scattered while those in futures are centered at a few places. As a result, purely local conditions affect spot prices more than futures.

A buyer of a futures contract has the privilege of converting it into actual cotton. If the former fails to keep pace with any advance in the latter, he can actually tender by selling it. In the case of a decline in spot prices, a seller of futures has the opportunity of acquiring the spot commodity at a favourable price and making a delivery upon futures if it fails to decline. It is this knowledge of such alternatives that keeps the futures price in line with that of the spot. Spot and futures prices are held in line not only by such knowledge but also by 'badla' or straddle operations between these two markets. For example if May Jarilla advances without a corresponding increase in the price of spot, merchants will buy the spot and sell a corresponding amount of futures. This kind of straddling will bring the two markets back into line. Similarly, spot prices may temporarily be too high relative to the futures. Merchants will then be encouraged to sell their spot cotton at once; and as sales are made, they will remove their hedges in a futures market by buying an equal quantity of the futures. This will tend to advance the price of futures and to lessen the demand in the spot market. The significance and importance of the spot-futures spread thus lie in the fact that the relationship of spot and futures prices primarily determines the effectiveness of hedging

Basis Gain and Loss: Fluctuations in the basis may, however, result in substantial gains or losses which are not offset by the normal hedging operation. It is a basis gain or loss that is all important to a hedger. He is protected against any general move

² Speculative operations on a large scale create price movements of futures which may not be accompanied by equivalent changes in spot prices.

ment in a market.¹⁰ If he can so manage his business that a basis gain covers costs of operation and leaves a profit, his business is a success irrespective of the market being high, low, advancing or declining. But the basis loss constitutes the principal limitation to a successful application of hedging.

Gross basis gain or loss is made up of two parts entirely different in character: (i) the expected basis gain and (ii) the unexpected basis gain or loss. Together they account for the 'gross gain or loss'. These estimates may turn out to be too small or at times more than sufficient. As a rule, they are comparatively small, though occasionally a relative and unexpected change of large proportions takes place. To some extent these unexpected basis changes are neutralised by counter movements at other times thus minimising their importance. Again, changing basis between markets make the hedge far from being a simple matter. Big concerns greatly enlarge their hedge position through the use of 'badla' or straddle. The aim of a hedger in effecting a combination of 'badla' transactions and hedges is to secure opportunities for shifting futures to meet changing trade or technical conditions and thereby to enlarge his gross profit. It affords him a greater freedom of operating in either spot or futures market as the situation warrants. It is needless to point out that such operations require ample resources and a thorough insight into the probable developments in the basis during every season. Moreover, hedging is something more than mere setting up counter futures transactions and hoping for the best, since, it does not insure against inefficient management, deterioration in commodity, changes in tariffs, handling and carrying costs and many other factors.

It may therefore be concluded that while the hedging supplies an efficient means of insurance, it does not give complete protection. The protection furnished by hedging is imperfect because of the consideration of the basis. Recognising hedging as an inevitable operation in the marketing of cotton crop, the basis risk must thus be regarded as an integral part of hedging and calculations must be made accordingly.

3. SYSTEM OF 'ON CALL'

Changed conditions in the cotton trade and market have brought about a modification in hedging practices for mills. Hand-to-mouth buying has characterised the textile industry for many years. Another variant is that some mills do not hedge purchases of spot cotton at all. They employ 'on call' method of buying their requirements. Buying and selling 'on call' has developed

¹⁰It may be said, perhaps, that the price risk faced by a hedging merchant or spinner in the fluctuations of basis prices is not more than 10 to 15% of the price risk faced by a non-hedging merchant or spinner in the fluctuations of full prices, on an average, for hedging provides perhaps, 85 to 90% protection against loss by price changes on the descriptions most commonly bought and sold." A H Garside: *Cotton Goes to Market*, p 288.

largely since 1920 due to hand-to-mouth policy of retailers and wholesalers of cotton goods.

Nature of 'On Call': An 'on call' transaction is the one wherein a seller agrees to deliver certain quantity of cotton and a buyer agrees to receive it within a certain period. An option or right for the date of 'call' is given to the buyer or seller, as the case may be, who fixes the price at so many points 'on' or 'off' the specified position of a futures contract. A 'call' is an option or a right to choose the time to fix the price. Under this system the position, quantity and points 'on' or 'off' are fixed at the time of making a contract except the price. Such a transaction takes either of two forms: (i) a buyer's call contract or (ii) a seller's call contract. For instance, in India, a large part of export business as well as a considerable proportion of buying by mills is done on either the buyer's or seller's call. Our mills very largely use a buyer's call and the sellers and merchants a seller's call. Under the buyer's call, the buyer has the privilege of fixing the price on the cotton purchased at any time until the delivery period and the reverse is the case under the seller's call. What is common in both types is that so many rupees or points 'on' or 'off' a particular position of a futures contract, are fixed at the time of making the contract; leaving the ultimate price to be fixed later on when the party having option of fixing a call thinks it advisable to do so. For instance, a particular Indian mill might estimate its needs for the next six months on September 1st at 1,000 bales of Sind / Punjab American varieties of fine average staple cotton, for each month. It then inquires from a merchant about his quotations for an 'on call', delivery at the mill in Ahmedabad. The merchant notes the prevailing basis for this style which may be Rs. 50 - 'on' May Jarilla. He estimates the cost of delivering cotton at the mill in Ahmedabad with an allowance for profit and considers any likely changes in the basis, the character of the crop, the ease with which business is being placed, the credit, etc. He in turn offers to sell the cotton at Rs. 60 - 'on'. Assuming that the mill accepts the offer, it will have a right to determine the price by calling it at any time during the life of the contract. The actual purchase price will be the price of the May futures on the day the call is fixed plus the 'on' difference of Rs. 60 -. If the cotton is not called sometimes during the period of the contract it is automatically called on the last day.¹¹ Under the seller's call contract the seller fixes the price of cotton sold and the other process is the same.

Inter-relation of 'On Call' and Hedging: Under a buyer's call,

¹¹ Usually, however, arrangements can be made to extend the period though this may be costly to the mills. Some merchants insert a clause in call contracts requiring the fixing of the price not later than the beginning of the delivery period of the futures and all try to persuade the spinner not to postpone his buying too long. They insist on the prices being fixed before the expiry of the contract.

if a seller of spot cotton does not wish to speculate for a profit through change in the basis, he will buy spot and sell futures holding the hedge or futures sales until the buyer fixes the price. After the final price is fixed, he buys in the futures and bills the buyer according to the terms of purchase. If he does not purchase spot cotton till the buyer calls and the basis widens in the meantime he incurs a loss in the case of 'on' basis or makes a profit in the case of 'off' basis. The reverse is true when the basis has narrowed. So far as the merchant in Bombay or Karachi is concerned he hedges supplies involved under his call contracts by sales of futures from the time the cotton is bought till the date it is called. In practice, the purchase of a futures by him on the day the cotton is called serves a double purpose of closing the merchant's hedge and establishing the basic price for the call contract to which is added or subtracted the agreed difference 'on' or 'off' the particular futures contract.

The call contract as such does not involve hedging operation. The primary use of a futures market in such a contract is for price determining instead of for hedging. A merchant does not need to hedge until he buys spot cotton and that would be an occasion for a hedge sale equally in any other case. Many mills in India seldom employ a futures market for hedging and a buyer's call contract largely frees them from such a need. When to place a hedge sale and how to handle it is a concern of a merchant. The only concern of a spinner is a fair fixation of price. A spinner usually does not call the price soon after entering upon a buyer's call contract. During the time that passes between the making of a contract and the price fixation, if the merchant has not yet purchased the required cotton to supply the spinner, the price fixed by the latter gives the former an open futures purchase for a hedge. If he has already bought the cotton, the price fixed closes the hedge sale. Thus the system of 'on call' and hedging are inter-related with each other, and 'on call' transactions are in purpose, if not in appearance, hedging operations.

Advantages of the system of 'On Call': If the crop of any particular variety is reported as being short and the price is comparatively higher, a mill will use the buyer's call for deliveries at certain dates and make the call when the price is such that it will result in a profit. The price of the contract on which the call is based is taken into account while quoting the prices on orders for yarns or cloth to customers, and after the sale is effected the price of raw cotton is fixed near that price as far as practicable. Similarly, a farmer can leave his crop with the factory owner fixing the 'on' or 'off' and leaving the final price to be settled when he thinks it profitable. Thus the producer and the consumer both can get the benefit of the system. The special advantages of this system to a spinner are that (i) it gives him a definite assurance of adequate supply of the particular quality of cotton required by him and (ii)

it permits him to fix the price of the cotton in line with the sale value of the product. A call contract protects the user against a loss arising from a change in the basis and allows him to fix the price when he thinks it advisable to do so. It enables a mill to obtain a stated quantity and quality of cotton without commitment as to price. A spinner secures his needs for some time ahead without having to pay up for it before he sells his yarn. As sales of goods are made, the mill calls for a portion of the cotton as needed or all at some particular time. If the general level of cotton prices declines, the mill will probably have to sell at lower figures to meet competition. But it will in turn obtain its supplies of raw cotton at a lower level by an amount equal to the decline in futures. In short, by means of 'call' contracts, a spinner is enabled to have a supply of the right kind of cotton when required, without taking the risk of price fluctuations, without having to store the cotton much ahead and also without having to pay interest on capital.

Its Dangers: While the system has certain advantages and renders genuine service to mills and growers, it is not free from drawbacks. From its very nature the first and foremost drawback is that a transaction is not really complete until the price is definitely fixed. It may happen that in a particular position of a futures contract there may be a large number of such calls accumulated to be fixed. Under such circumstances, prices are likely to go up temporarily. This in turn affects the basis which is not beneficial to the trade in general. Another disadvantage is that a buyer is not going to the market at the time of entering into an 'on call' transaction. This has the effect of not allowing the price to find its own level, which normally would have been the case had the buyer made an outright purchase in the market. Thirdly, it keeps the rate of the transaction standing. To call cotton without fixing prices is tantamount to taking advantage of price fluctuations in future. This, at times, encourages the user to indulge in speculating in futures or the probable trend of prices and the danger is that it may lead him to 'take a view' of the market. In other words, the system induces or facilitates the user to speculate in 'call contracts' which is not healthy for merchandisers, producers or consumers of actual cotton. This generally happens when a buyer anticipates the demand of certain descriptions at a future date. Moreover, the action becomes a regular price-making factor in the market when the buyer comes to fix up the call. Hence, it is difficult to say whether, on the whole, the advantages of the 'call' system tend to outweigh its probable dangers.

4. EXTENT OF THE USE OF HEDGING

Hedging and Merchandising Interests: The use of hedging varies widely between the various interests engaged in the marketing of cotton. Among the cotton merchants, dealers, shippers and those who share in the handling of raw cotton in India hedging is a

general practice.¹² Those who are inclined to take speculative risks rather than make use of a futures market do not hedge. Otherwise cotton is hedged from the time of its reaching the concentration point until represented in sales of manufactured goods. The practice of hedging is regarded by the merchandisers of spot commodity not only as desirable but economically also a sound policy for their business venture.

Hedging and Mills: Mills avail themselves of hedging facilities partly by way of (i) directly selling and buying futures respectively against their purchase of raw materials and sale of finished products and mainly (ii) by employing futures as hedges by an indirect method of using 'on call' system. The practice of buying 'on call' which while not a hedge may serve to keep the position of mills even, if properly used.

Hedging and Farmers: Among the farmers especially in India hedging is rarely used.¹³ They do not hedge for obvious reasons. Most of them sell promptly. In many instances, they are indebted to middlemen or financiers. They are thus not in a position to hold cotton under hedge. Further, a grower's failure to use a futures market even supposing he would like to avoid the risk involved in price variations can easily be explained. In most cases, our farmers have no knowledge of futures or hedging. Those who have are faced with other difficulties. The crop of an individual Indian farmer is generally 10 to 20 bales and in a few cases, 50 to 100 bales. Under this situation he cannot employ futures as sales against his crop. Moreover, the clearing amount and at times the margin money required of the holder of an open futures contract make it difficult for a poor and small grower to hedge. In this country, a grower with a large crop can ordinarily sell his cotton promptly without the agency of a futures contract. In so doing he avoids commission expense, interest charges and cost of carrying spot cotton. Finally, in the majority of cases, the farmers wait for better prices due to their natural inclination as sellers.

Conclusion: So far as the extent of hedging is concerned, it may be said that a cotton futures market in India is used for hedging as a regular practice by exporters, merchants, and indirectly by manufacturers. But the average Indian grower or factory-owner makes very little use of hedging.

¹² Personal investigation.

¹³ Personal investigation and also ref. to report of the Bombay Provincial Banking Inquiry Committee; 1929-30, Vol. I. p.101.

CHAPTER VIII

THE HEDGE CONTRACT SYSTEM FOR INDIAN COTTON

Introductory: IN the preceding chapter it has been pointed out that there are two kinds of risks against which a hedger needs protection. The first arises from fluctuations in the price level of cotton and the second from variations in the basis. So far as the first risk is concerned, a hedger gets complete protection by entering into a futures contract in a futures market to counteract the sale or purchase of cotton in a spot market. With regard to the second, the position is best summarised in the market maxim that 'basis cannot be hedged.' In other words, a hedger has to bear the risks involved in basis variations, since, he has no means of avoiding them. All he can do is to take into account the elements of basis and provide for them before making any commercial commitment. Up to now, the trade has not been able to devise any method of counteracting the risks involved in basis variations. It has also been made clear that even the 'on call' system is dependent on the basis and is not free from limitations; in spite of the fact that the system is a definite step forward on that of hedging in the cotton trade and is advantageous to the user. Apart from the basis risk, a hedger in India has to face an additional risk resulting from the present system of hedge contracts.¹ We propose therefore to discuss the present system of hedge contracts in Bombay and to suggest improvements to relieve a hedger in India from the burden of the special risk.

1. CONTROVERSY OVER THE NUMBER OF HEDGE CONTRACTS

Two Schools of Thought: Since the inception of a central organisation to control futures trading in Bombay, there have been two schools of thought on the system of hedge contracts: (i) Those who believe that there should be only one hedge contract for the whole of the Indian cotton crop, and (ii) those who believe that there should be as many contracts as there are varieties of cotton in India.

The advocates of the system of one hedge contract are the

¹ Hedge contracts in India are nothing short of futures contracts abroad. However, the trade indulges in using the word 'hedge' contract because the term 'futures' has a derogatory meaning in India since it is associated with gambling in Ank-farak and Kutcha Khandi.

Government of India,² and the Bombay Millowners' Association.³ The second scheme is adumbrated mainly by the brokers and traders.⁴ Thus, there are two extreme shades of opinion on the question, representing on the one hand, the buyers' point of view, and on the other, the standpoint of the sellers. The gulf between them is by no means narrow.

One or several hedge contracts? Those who advocate the adoption of one hedge contract for all the varieties of Indian cotton maintain in the first place that, in the Bombay market, it is not possible for mills to effect a satisfactory hedge against forward contracts in yarn and cloth for which raw cotton has not already been secured. Secondly, under the group of several hedge contracts, a shortage of deliverable supplies against any one of them would raise prices high enough frustrating thereby its utility as a hedge contract.⁵ But if there is only one hedge contract for all the groups of Indian cotton, failure of any one of them will not affect the price of the hedge contract. It is therefore advanced that the basis of the hedge contract must be wide enough to prevent cornering and squeezing or what is known as 'manipulation' by speculators. The third point raised against the system of several hedge contracts is that since there is a single hedge contract in all other leading markets of the world, our market should not lag behind in this respect. For all these reasons, they claim that the ideal to be aimed at should be the system of one hedge contract for the whole of India's crop.

No matter what form of new contract we may introduce in our market, it is certain that it would never constitute a satisfactory hedge because of the inherent shortcoming, as we have seen in the preceding chapter of the very principle of a hedge contract in any market of the world. On the other hand, it appears that the greater the number of hedge contracts, the better for mills, as it would enable them to buy a contract closely approximating to what they have sold. For example, if a mill has sold yarn of 6½ counts, they could buy the Bengal contract from which this

2 'As it is only hedge contract the Government of India recognise that the ideal to aim at is that there should be, as in the Liverpool and New York markets, a single hedge contract.' Government of India, Commerce Department, No. 6505, correspondence between the Chief Secretary to the Government of Bombay and Secretary to the Government of India—Better known as Mr. Innes' letter, 25-9-1920.

3 'The ideal to be aimed at in all well established markets of the world is that there should be one contract open for the whole of the twelve months.' Report of the Millowners Association, Bombay 1931, p. 59.

4 'In the opinion of my Committee the number of hedge contracts should be increased to ten maximum and the growth tenderable under each of them should be narrowed.' Representation to the Cotton Contracts Act Committee by the Bombay Cotton Brokers' Association 1930, p. 15.

5 For instance, the Oomra contract for January, 1932 was so squeezed owing to a short crop that its price at one time was quoted at Rs. 20 higher than Broach. The Oomra crop was a failure and the shortage of its arrival caused bears to cover their foreign sales of Oomra cotton at a great sacrifice.

quality is ordinarily produced and for 10 to 16 counts the Oomra contract will serve the same purpose. For higher counts the Broach contract can be availed of. If they could only buy a single contract, it would bear much less relation to what they have sold because, there would be cotton tenderable against such a contract differing in value probably to the extent of a hundred of rupees per candy and differences would be liable to wide fluctuations at varying intervals. Moreover, our enquiry in this connection goes to show that mills in India hardly use a hedge contract for hedging against purchases of cotton. They employ the system of 'on call' for the purpose. This indicates that a fair trial has not been given by the mills to the system of having several hedge contracts in Bombay.

Another argument in favour of one hedge contract is that "the contract must be wide enough to prevent cornering by speculators." When such a statement is made, the fact is lost sight of that the same thing happens in New York in spite of the maintenance of one contract for the whole of the American cotton crop. Similarly, in Liverpool there are also manipulations, corners and squeezes. Moreover, the experience of the last 30 years during which period attempts made by Messrs. Umar Sobani, Sangildas and others resulted in failures, falsifies the plea. Further, when cornering took place our market was passing through abnormal times. Today, the E.I.C.A. ensures pretty well that a person who attempts a corner does not run away with the market and they have powers to knock the bottom out of the venture. They do see that no one is able to make a corner. In normal times, as a matter of fact, it may be said that there is not much chance of cornering the market. In answer to the third line of attack, the fact must be mentioned that the leading markets of the world do not follow the system of one hedge contract. Alexandria for instance, trades in three contracts for different varieties produced in Egypt whose total crop on an average does not exceed a million bales. These three contracts have been based on three different and distinct varieties grown in Egypt. They would not have maintained more than one contract but for the fact that the spinners all over the world would not be able to make their purchases had there been only one contract for all the varieties grown in Egypt. Again, in Liverpool, there are a number of contracts to deal in various kinds of cotton which differ from one another in spinning value. They have the Empire contract for cotton other than American and at the same time, there are separate contracts for Egyptian Sakels and Uppers. The history of the establishment of the Empire contract itself shows that the best authorities in Liverpool are against having one contract for widely varying growths. Liverpool refused to have one contract for American, Indian and

African growths. The claim that Liverpool has one contract for all kinds of cotton is therefore misleading. It will be noticed that all the arguments made by the advocates of the system of one hedge contract for a country like India fall to the ground. This confirms the contention of those who insist that there should be separate contracts for styles of widely different spinning values.

Conditions in India do not warrant the adoption of one contract for all the varieties: In order that the question of adopting the system of one or several hedge contracts may be settled once for all, let us further examine here the advisability or otherwise of the system of one hedge contract for all the growths of Indian cotton. At the outset it may be noted that the proposition bristles with many practical difficulties which cannot be overcome so easily. As things stand at present, there is a vast difference in the characteristics of several growths grown in India. The cotton crop of America has a uniform season. It begins about August, and ends about March. In India, the cotton season varies from district to district according to its geographical position. At one place the crop is finished about the same time as it begins in another. Again, varieties of growths in India far outnumber those in America. Hence, if there is a system of one hedge contract in India the unsaleable and unwanted cotton varying from low Bengals to Super-fine Broach will be tendered. It will not then be a safe hedge and buyers will be scared away. Even mills will not be able to make use of it and in reality they will be afraid of it. If the mills who can use cotton for one or other counts are afraid, what about the traders who are not themselves the users. They will be still more afraid of such a contract for which they will not be ready to bid higher prices. No buyer would come to buy the contract in which he himself does not know with certainty what quality he is going to get. Such a contract would be only for the facilities of the seller who would sell it freely and would not find it difficult to tender. If such a contract is created, not only Indian short-sellers but the whole cotton world will come to sell their cotton in India either by way of speculation or hedging. What a huge pressure such a contract will be subjected to can easily be imagined. It will always keep the contract price depressed in parity with the foreign cotton thus putting the country at undue loss.

There is another difficulty involved in the adoption of a system of one hedge contract and that is, if there is to be one hedge contract some one style will have to be taken, as in America they have 'Middling', as a common basis. What style would make such a basis as representing all Indian cotton and its value is a point worth considering. The answer is that there is no such style in India as 'Middling' is in America which can represent the whole of the Indian cotton crop. Further, if the system of one hedge contract is adopted for all the different growths of Indian cotton, the calculation of the probable 'on' and 'off' will become a hazard.

dous operation. The contract will be depreciated and the basis will have to be raised. Moreover, the trade at large thinks that they cannot have one hedge contract for all the varieties of Indian cotton crop.⁷ It must not be forgotten that the success of any hedge contract system depends also on the attitude of the market. For instance, if one hedge contract was forced on the market and if the dealers refuse to trade in, the result will be that there will be no hedge contract at all and the trading will be confined to spot transactions only. It is therefore obvious that an impossible state of affairs might arise should every Indian quality be included under one contract. It will be noticed that for all these difficulties the system of one hedge contract will have its repercussions on the price structure of Indian cotton and the poor farmers will be made to suffer the most, because, it is the hedge contract quotation that forms the basis of the price offered to the upcountry cultivator. The fact is that we should not put more weight than the hedge contract can stand; otherwise, the effect will be to depreciate the price of Indian cotton. If the proposal of one hedge contract is adopted our cotton might sell materially below its intrinsic value. It may therefore be concluded that one hedge contract system is most unsuitable for a country like India.

Observations: The question is whether the contract should be broadened or narrowed. Again, what size of the contract will be in the interests of both, the seller and the buyer? The theory of a hedge contract is that it should be as narrow as possible, i.e. it should contain products of as nearly equal quality as possible, and that it should be wide enough to make a corner in the contract normally impossible. These two requisites are difficult to be satisfied. If the contract is too narrow it is exposed to corners and squeezes; and if too wide to include cotton of inferior quality, the buyer will be scared away and the result will be that the price-level will remain depressed. It should therefore be considered at the outset whether the contract is for the benefit of the buyer or of the seller. In fact, it should be attractive to both. The ideal contract is the one that reflects at all times the value of actual cotton.

On the issue whether the contracts be widened or narrowed down, the general opinion is that the contracts should be widened. A narrow contract is regarded as a bad contract in many respects by everybody. The seller may be squeezed in a narrow contract. It is therefore not a good contract for the party at stake. A narrow contract has other drawbacks. The crop is at the mercy of the weather and a catastrophe may happen. It is therefore in the interests of the trade in general—not of individuals—to make the contracts sufficiently broad. The first and foremost question is whether all the cotton grown in India must be included in one of the other contract. There are at present a great many kinds of

7 Personal Talks.

cotton which are left out and the question is whether these varieties should be made tenderable against the hedge contracts. That is the fundamental point. Can a system be devised in such a manner that cotton grown in every corner of India even to the minimum extent can be tenderable in the contract? Here is the most practical difficulty. The reply can only be that such a scheme cannot be devised.

An example of a well-constituted and yet a broad contract is furnished by the American contract which takes care of both the current crop and the previous year's carry-over. In spite of this the fact remains that there also certain varieties are not tenderable and all kinds of cotton are not included in the contract, since, the contract signifies that "nothing below Middling shall be tendered" which excludes nearly 20 to 25% of inferior varieties. The existing system in India is not satisfactory to all sections of the trade, because, the interests of the consumer and the producer are quite different. The producer would always like to have a contract with a specific single growth tenderable against it, while the consumer would like to have a contract against which as many varieties as possible are tenderable so that he can buy his requirements cheaply. For instance, the present contract is considered by some as being too broad to discourage buyers which is against the interests of the growers. But any artificial demand will not, in any way, benefit the growers. The harm done by the bear raid is equal to that done by the bull raid. Therefore, the contracts should be framed in such a manner that they must not be exposed to either bear or bull raids. The proper functions of a hedge contract are to protect the interests of purchasers, sellers, growers and traders. What is wanted is a hedge contract which is indicative of the average price of our cotton. The correct thing therefore is not either to broaden or narrow the hedge contract but to remove from it any variety which artificially depresses prices and frightens away buyers from it. The next point is how many contracts the Bombay market can deal in? It is difficult to form an ideal system of hedge contracts for a country like India. It is certain that all the important growths should be made tenderable under the existing system of hedge contracts.

2. EVOLUTION OF THE HEDGE CONTRACT SYSTEM FOR INDIAN COTTON

In the early days of cotton futures trading in India, there were three popular contracts: (1) Broach, (2) Bengal, and (3) Dhollera. Each contract called for the delivery of one grade only. For instance, the Broach contract was for Broach cotton alone and did not include any other variety, that is, cotton grown in an area of about 40 to 50 miles from Ankleshwar to Dabhoi was regarded as the Broach crop. Similarly the Bengal contract stood for the cotton from the U.P. only. Dhollera was mainly for the

long staple cotton. The buyer then knew definitely at the time of purchase that if he chose to take delivery only the specific grade could be delivered. It was therefore employed to dispose of or acquire cotton. As time passed the systems of classification and fixing of standards became more elaborate. This greatly limited the ability of an individual to gain control over the deliverable supplies and in that respect the improvement was worthwhile. The contracts were then widened and the deliverable supplies increased. As several qualities were now made deliverable at the option of the seller, it seemed only fair that some adjustment should be made to allow for variations in standards. This was complied with by what is known as the system of fixing differences. A particular grade or a group of grades was chosen as the basis. Should the seller find it desirable to tender one or more of the other deliverable grades, an allowance in price was made to compensate both the parties. In 1917-18 there were thus five hedge contracts to represent the five principal varieties grown in India. These contracts remained in existence for years though the details of some of them have been changed from time to time. They were prescribed during the world war of 1914-18. Since 1918, slight modifications had been made here and there but up to the middle of 1942—up to the middle of the Second World War of 1939-45—it had not been found possible to alter the contracts in any substantial manner. As a matter of fact, a radical change was long overdue. Hence, it will be of some interest to get a bird's eye-view of the evolution of the new futures contract for Indian cotton called "the Indian Cotton Contract" working in Bombay since the 15th July 1942.

Seven Contracts during 1919-22: Its genesis may be traced from the period of the first world war. There were then a fairly large number of hedge contracts representing various principal varieties produced in India. These contracts were availed of either for the purpose of hedging and trading in futures for speculating in cotton or for effecting delivery by merchants whenever it was advantageous to do so. The theory of futures that a hedge contract is essentially an instrument of insurance and should be so worked as to discourage the acquisition or disposal of the commodity through its medium was not acknowledged in practice. The result was a total misapprehension and misgivings about this system. The general chaos in the futures market for Indian cotton was the order of the day. The word 'hedge' used in such a connection was rather a misleading term. Failure to observe the fundamental principle of "hedge" contract encouraged manipulators to turn it into a delivery contract. The resultant dislocation of the futures market tended to affect adversely the best and long-lasting interests of all concerned. The year 1917, when the Indian cotton futures market was involved in a crisis may be cited as a case in point. In June 1918, under the Defence of India rules, the cotton

contracts control committee was appointed by the Government of India to control the cotton trade in Bombay. This committee recognised five contracts for the purpose of trading in five principal varieties grown in India. These contracts were: (1) Fully Good Machine ginned Bengals for 25th January delivery, (2) Fully Good Machine ginned Khandesh for 25th January delivery, (3) Fine Khamgaon Akola fair staple for 25th January delivery, (4) Fine or Good Machine ginned Broach for 25th April delivery, and (5) Good Machine ginned Westerns for 25th May delivery. But as the committee was constituted as a temporary measure, the control of dealings in cotton was passed into the hands of the Bombay Cotton Contracts Board.⁸ The Board followed in the beginning the rules previously laid down in connection with hedge contracts and a little later, went a step further by making the addition of two more contracts; viz., the Punjab/American and Oomras. This brought the number of contracts to seven. Certain omissions and modifications were also carried out by the Board with changes in names and basis as under:—F.G. Bengals, (2) F.G. Broach, (3) Fine Oomra, (4) F.G. Oomra, (5) Good Southerns, (6) Punjab/American and (7) F.G. Khandesh. It may be observed that in absence of any clear conception of the theory of hedging and of the recognition and acceptance in practice of the fact that a hedge contract should be balanced enough to afford an equal measure of protection and opportunity to both the buyer and the seller, these contracts were wrongly regarded as hedge contracts. In fact, they were no better than the usual delivery contracts of today.

Five Contracts from 1922 to 1930: The Cotton Contracts Board as a central body controlled the trade for more than three years from January 1919 to May 1922. Then it handed over the charge to the newly constituted central body known as the 'East India Cotton Association' under the Act of 1922.⁹ This Association realised the futility of a large number of contracts for trading in Indian cotton and according to their own conception they tried to reduce the number as far as convenient and practicable. The seven contracts were amalgamated into five by incorporating the Punjab/American into Broach hedge contract and dropping altogether the Khandesh contract. Certain other innovations were also carried out, e.g., periods of delivery were extended, grades above and below were allowed to be tendered with probable 'ons' and 'offs' for respective classes. Again standards were prescribed for both grade and staple, though there was no stipulation for better staple length. The five permissible contracts were: (1) F.G.M.G. Bengal, (2) F.G.M.G. Broach, (3) Fine M.G. Oomra, (4) F.G.M.G. Oomra, and (5) Good M.G. Southern. So far as the cotton speculator was concerned, the Broach contract proved great-

⁸ The Bombay Cotton Contracts Control (War Provision) Act, 1919.

⁹ The Bombay Cotton Contracts Act No. XIV of 1922.

ly successful. But the interests of the cotton trade and industry began to suffer, because, the Broach contract had to bear the three-fold burden of the crop, the hedging and the speculation. In course of time, the genuine seller and the buyer, or to be more exact, the grower and the spinner, began to feel the pinch of the defective technique of the system for hedging. A note of caution was sounded by persons whose interests were at stake. Sometimes a huge cry for the reformation of the individual contract and for the revision of the entire system was raised from a number of quarters.

Among those who believed themselves to be aggrieved parties, the chief was the Bombay Millowners' Association. Not feeling satisfied with the merger of seven contracts into five, they demanded a further reduction in the number of hedge contracts to three. In order to give a practical turn to what was wanted by them, they adumbrated the following scheme in 1924:—(1) That the present F.G.M.G. Bengal contract be restored. (2) That the present F.G.M.G. Broach and the Good M.G. Southern contracts should be amalgamated into one; the staple must be specially determined for each growth and no cotton below 6 '8" staple should be tenderable under this contract, the Moglai cotton coming from the Nizam's State should be included in the amalgamated contract provided it was not below 6 '8" in staple. No cotton under "Good" be made tenderable against the same. (3) That the present Fine and F.G. Oomra contracts should be amalgamated into one provided that only Fully Good to fine Cottons be tenderable from the beginning of the year until the end of May and after that time only Good to Fully Good. Cotton known as Gaorani cotton from the Nizam's State be made tenderable against the same. Staple was to be not less than $\frac{1}{2}$ ". The scheme however did not meet with approval of the cotton trade, for, one section termed it as a 'bearish' plan while the other discarded it as the most inconsistent and incomprehensive notion. It was, perhaps rightly, turned down by the East India Cotton Association in search for a better planned and well conceived system for Indian cotton.

A year later in 1925, another scheme was brought to the notice of the E.I.C.A. for their consideration and approval. This was the proposal put forward by Forbes Forbes Campbell & Co. Ltd. It advocated the adoption of the following contracts for the purpose of hedging in Indian cotton:—(1) F.G.M.G. Bengal was to be as at present, (2) F.G.M.G. Broach was to be retained as at present with option of tendering Fine C.P. No. 1, Tinnevelles, Karungannis and Cambodia. Delivery months: March, April, June, August. (3) Fine Oomra should be as at present with the addition of all stations of F.G. Oomra contract and Jalna; and with option of tendering any cotton tenderable against the Broach contract. Cotton tendered from January to May if awarded more than half a class off Fine should be rejected. Cotton tendered from July to

September if awarded more than full class off Fine should be rejected. (4) Good M.G. Southern was to be as at present but with the option of tendering any cotton tenderable against Navsari, Surat, Rajpipla and Punjab/American standards. Delivery months were to be May, July, August and September. The E.I.C.A. could not find anything worth-noting in this proposal as the plan had nothing tangible to offer except the half-hearted attempt at further amalgamation of contracts. It did not consider whether it would be advisable to include the growth of one contract into the other and still to run the market without being unduly hampered or disturbed. Moreover, like the Millowners' Scheme, this did not take into account the basic point of futures that a hedge contract should represent a fairly close relation to the actual values of cotton. If contracts were to be amalgamated in the manner suggested above, it would mean a suicidal step with the result that contracts might be totally neglected by the trade or they might remain permanently depressed. Hence, the trade in general showed its reluctance to adopt this plan.

Then in 1928, late I. I. Mashruwalla advanced the following plan of four contracts for the betterment of the system:—(1) F.G.M.G. Bengal to be retained as it is. (2) F.G.M.G. Broach should include Nizamabad and Warangal, White Northern and C.P. (including Harda and Bhopal) half grade off only. Delivery months to be March April, May, June/July, August and September. Staple to be not less than $\frac{1}{4}$ ". If cotton more than Rs. 100 per candy is tendered, the buyer shall get a penalty of $\frac{1}{2}$ of all 'ons' over Rs. 100 for taking up very high cotton. (3) Fine M.G. Oomra should include Khandesh, Moglai (Hyderabad North of Latur and Karkali Oomra) and Mathia with half a class ('off' from November to June and from July to October up to full grade 'off'. Cotton more than $1\frac{1}{2}$ grade 'off' or 'on' if tendered will be subject to a penalty of Rs. 25/- per candy to buyers from sellers. (4) F.G.M.G. Southern should include Dholera, Kadi/Viramgaum, Kalagin, Cutch, Nanded and Latur, Ujjain. Months of Delivery to be February March, April, May June, July/August and September October (either single or double, but believe double would be preferable). Staple to be $\frac{1}{4}$ " and 7 8". Tenders under $\frac{1}{4}$ " will be rejected and tenders above 11 8" may be rejected or a penalty of Rs. 25 - per candy may be claimed by the buyer. However, this Scheme failed to satisfy the aspirations of the cotton trade and the E.I.C.A. had to reject it. The scheme was found lacking in the foresight since it did not take into account one of the main principles of a hedge contract that there should be adequate safeguards to protect the market against manipulations, especially, against the bear speculative raids. If this scheme would have been given any recognition, the result would have been nothing short of encouragement and accentuation of the most undesirable type of manipulations on the market. Taking all the three schemes from 1924 to 1928, we find that none of them was adoptable by

the trade. It would not be an exaggeration if it is said that by the acceptance of any one of these plans, our cotton would have been the cheapest commodity available both in India and in the world and the party receiving the blow would have been the Indian farmer.

Three Contracts during 1931-42: The rejection of the above schemes did not, however, solve the main problem of the cotton trade. This problem was the devising of a sound hedge contract system for Indian cotton. Though at times a slight and at other times furious agitation was in evidence regarding the defective technique of the hedge contract in Bombay, the Indian cotton world had to put up with the situation as it was in absence of any better device. In 1930, at the instance of the trade, the Government of Bombay consulted the various interests and appointed a committee to make recommendations for the betterment of the cotton trade. The committee proposed inter alia to retain the Broach contract as it was with the addition of the Kumpta and Upland growths of the Dharwar District and to leave the existing two contracts in Fine Oomra and Bengal untouched.¹⁰ This proposal failed to put an end to the ailment of the trade since no real adjustments were to be made in the then existing contracts. On the other hand, of the five hedge contracts, the last two contracts had not been popular in Bombay.¹¹ In fact although there have been five contracts, trading used to take place only in the first three and the last two were virtually dead because they were neither active nor quoted upon. The popular contracts were therefore only three in number. They were Broach, Oomra and Bengal; the concentration of trading under them being 75 to 80%, 12 to 15% and 4 to 6% respectively. However the trade wanted some permanent solution for their troubles. Hence, the E.I.C.A. at last constituted a hedge contract sub-committee of its own in 1935 to examine the system and suggest improvements in the framing of the revised hedge contracts. Their recommendations were as under:—(1) The basis of F.G. Bengal hedge contract should be changed from 'F.G. U.P.' to 'F.G. Punjab' and the months of delivery for this contract should

10 Report of the Wilks Committee, 1931, p.7.

11 Table* showing cotton bales traded against each hedge contract.

Year ending 31st August.	I G. M.G. Bengals.	F G M.G. Broach.	Fine M.G. Oomras.	F.G. M.G. Oomras	Good M.G. Southern.
1930 31	34,900	71,700	63,700	—	—
1931 32	28,600	35,400	20,800	—	—
1932-33	26,200	62,600	40,100	—	—
1933 34	53,500	10,400	62,000	—	—
1934 35	77,200	69,100	56,700	—	—
1935 36	26,550	263,800	16,050	—	—
1936 37	17,000	76,700	52,450	—	—
1937-38	8,700	132,200	19,850	—	—
1938 39	5,800	60,200	8,700	—	—
1939 40	29,150	61,600	31,050	—	—

* Compiled from Bombay Cotton Annuals.

be prescribed as December, January, February, March, April, May, June, July, August and September. (2) Punjab/American and saw-ginned Dharwar cottons be excluded from the Broach hedge contract. White Upland cotton be excluded from Southern hedge contract and included in the Broach, subject to the stipulation that the staple of such cotton to be made tenderable shall not be less than $6\frac{7}{8}$ " in length. C.P. No. 1 should not be included in the Broach. Surat, Navsari and Rajpipla cotton might be made tenderable throughout all months of delivery. The months of delivery for Broach contract be prescribed as April, May, June, July, August and September. (3) In the Fine Oomra contract, C.P. No. 1 C.I. cotton grown in Khandwa, Sanewad and Barwaha and such other places as the Board may determine be made tenderable. The staple length of the cotton tenderable against this contract be prescribed at $9\frac{1}{16}$ " in order to prevent the spread of Garrow Hill seed in the Oomra crop. (4) The existing Southern contract be scrapped and that in its place a new staple contract be styled 'Coomptah contract' be evolved. Against this, cotton with a staple of not less than $7\frac{7}{8}$ " in length be made tenderable with Coomptahs of not less than $7\frac{7}{8}$ " staple as the basis. No Upland cotton from any station should be made tenderable against this new contract, nor Tinnevellys, Bijapur, and Bagalkote be included in it. The months of delivery for this be prescribed as May, June, July, August, and September. Somehow, these recommendations were not given a trial by the trade. Their consideration was postponed and in the meantime Messrs. Kishan Prasad & J. Vonesh were asked in 1936 to report on the proposed alteration of the contracts. They submitted that the following hedge contracts be substituted for the existing ones:—(1) F.G.M.G. Bengal contract with F.G. Punjab as basis. Mathia box to be raised by one class. Trading months to be December/January, March, May, July and September. (2) Fine M.G. Oomra contract with Fine Berars as basis. Khandesh, Moglais and Broach should be included in it. Trading months as in contract (1) but rejection clause to be for July to September delivery one class off. (3) F.G. Broach contract, with F.G. Punjab American as basis. The descriptions tenderable to be all Surati with $7\frac{7}{8}$ ", Dholleras $3\frac{1}{4}$ ", Kadi-Viramgaum $3\frac{1}{4}$ ", Kalajin $7\frac{7}{8}$ ", Sind-Punjab/American 4F $3\frac{1}{4}$ ", Coomptahs $7\frac{7}{8}$ ", Western and Northern Farm $7\frac{7}{8}$ ", Cambodia $7\frac{7}{8}$ ", Korunganni $7\frac{7}{8}$ ", Malwa $7\frac{7}{8}$ ", Verum $7\frac{7}{8}$ ", Ordinary Western $3\frac{1}{4}$ ", Bijapur/Bagalkot $3\frac{1}{4}$ ", Miraj $7\frac{7}{8}$ " and Tinnevellys $3\frac{1}{4}$ ". Standards should be prepared for F.G. Malwa, Verum and Western and Northern Farm. Trading months same as for contract Numbers (1) and (2). Nothing below one class off be tendered. Report prepared by these outstanding personalities of the cotton trade deserved high consideration. Their recommendations were really immune from general misgivings and unwanted criticism. Their suggestions were quite practical and beyond theoretical shortcomings. One fails to understand why this report was not implemented.

In the meantime several complaints were made against the then existing system of hedge contracts in Bombay. These complaints may be divided into three groups: (a) those of the Millowners, (b) those of the Agriculturists and (c) those of the Trade. Taking first the Millowners' complaints, their main objection was that in certain months of the year, they were unable to make hedge contracts which can be used against their purchases of cotton or sales of cloth since there were only two or at the most three positions in which a particular contract was traded in. Their second objection was that when one contract expired no new contract was available to transfer the hedge. Hence, the Millowners wanted a contract open for all the twelve months of the year with a continuous character. So far as the agriculturists are concerned, their principal objection was that they did not get a proper hedge against their cotton since all growths did not come under one or the other popular hedge contract. Their bone of contention was that the growths which were not included under any of the three hedge contracts realised less values than others.¹² Hence, what they wanted was a system so devised as to include each and every Indian style under the working hedge contracts. As regards the trade, their main objection was that the delivery period was extended to two months which unduly depress prices and at the same time gave to a seller an undue advantage of delivering for 55 days. Secondly, the contracts were very wide making it thereby difficult to accept delivery in the fulfilment of a contract. Thirdly, the contracts were not balanced and as a result, the double pressure of hedge and speculation fell on one contract, namely, the Broach which was regarded as the price-barometer for Indian cotton. This uneven pressure widely depressed the Broach prices resulting in the price depression of all other varieties in general. What the trade therefore needed was that months of delivery should be all single and the contracts framed in such a way as to make concentration of trading proportionate to all. It was therefore unanimously recognised by the E.I.C.A. in 1938 that "the question of the existing hedge contracts require adjustments."¹³

The real weakness of this system was that for all intents and purposes there was only one active contract in Bombay, namely, the Broach to take care of speculation and the whole Indian cotton crop. The Oomra contract was balanced well enough but it comprised of few and essentially export styles. As these styles were taken up and shipped the contract registered a progressive tightness which often developed into a mild corner or what is known as 'squeeze' with the result that growers and stock-holders of Oomras were shy of using it freely as a hedge. The Bengal contract was

12 "The reason why it is necessary for every growth to come under hedge contract is that one cannot be satisfied with the differences that would be fixed between untenderable cotton and the cotton which is tenderable under the hedge contract"—Personal Interviews

13 18th Annual Report of the E.I.C.A. for the year 1938-39.

very narrow as most of the Bengal cotton was stocked in Karachi and was little used as a hedging medium in Bombay. The Southern contract was badly constructed since most of the styles included in it were consumed locally and therefore did not come to Bombay. In consequence, this contract met with a natural death since its inception. The net result was that the Broach contract received a double pressure of both speculation and hedging and was often rendered subject to fluctuations unwarranted by the existing market conditions. Needless to add that it was this absence of a proper balance of hedge contracts in Bombay which was the source of all troubles. It follows that the spirit underlying the reforms in the system should aim at such a reconstruction that would bring an even distribution of both the speculative and hedging interests and eliminate the possibility of over-trading in any contract. It was thus the faulty construction or 'technique' of this system of hedge contract in the Bombay market which was the real cause of depreciation in a hedge contract. It may therefore be observed here that if the system of hedge contract for Indian cotton is to discharge its functions properly it should be reconstructed. The revision of the system will have to be thorough in all its aspects too.

A year later in 1939, the Universal Standards Sub-Committee also made general recommendations for the ad hoc revision of the hedge contracts, particularly, regarding the staple lengths to be prescribed for each contract. But the year 1939-40 as we all know was the year of abnormal times due to the second world war. The Board never-the-less tried to give due consideration to the question of the revision of contracts by appointing another sub-committee in 1939-40 to submit their proposals in due course. At the same time the E.I.C.A. gave expression to the view that "it is not possible to frame one contract which can carry the whole burden of the Indian cotton crop." After fully considering all the phases of the question and weighing all the probable pros and cons, we came to the conclusion in 1942 that "if the system of hedge contracts is to discharge its functions properly the existing hedge contracts in Bombay should be reconstructed. The revision of the present system will have to be thorough in all its aspects". Three hedge contracts covering all the main varieties of Indian cotton as suggested by us were: (1) F.G. Bengal contract with the addition of Kathiawar-Muthia cotton. Basis for Muthia should be Fine. The seller should be given the option of delivery at Karachi. Months of delivery should be single as December, January, March, May and July. (2) F.G. Broach contract, with the amalgamation of Southern contract except the Surat, Navsari, Cambodia and Kurunganni should be retained as it is provided, no cotton below $3\frac{1}{4}$ " staple is made tenderable. Delivery should be in single months as March, May, July and August. (3) Fine Oomra contract should include Khandwa-Burhanpur and Khandesh cotton. Delivery months should be single as December, January, March, May and July.

One Contract since the Middle of July 1942: An outstanding occurrence of the year 1942 was the strained relationship between the Broach and Oomra contracts. The spread between them went up to Rs. 60/- in view of the Far Eastern markets being cut off for the short staple varieties. It was during this time when anxiety was experienced for Oomras that, a squeeze in the Oomra contract was engineered and carried out successfully. This should sound paradoxical in the face of a good harvest in the Oomra tract and greatly reduced outlets for these varieties. The factor accounting for the squeeze however lies in the then existing transport position in India. The unavailability of wagons from upcountry to Bombay helped the manipulators to realize their purpose. The foundation of the squeeze began with the spread between the Broach and Oomra contracts. The Oomra January position went up as much as to Rs. 25 1/2 above the March delivery. In consequence, the merchants who had their hedges in the Oomra January were forced to square their transactions at a serious loss. Afterwards, the squeeze was relieved and the Oomra January position ultimately closed at Rs. 3 1/2 under the March delivery.

None-the-less, the squeeze left important repercussions on the market. It became obvious that since the transport difficulties would continue during and sometime after the war, an emergency contract for future should be devised to meet the altered conditions both at home and abroad. Again, because the short staple cotton was not much consumed by the Bombay mills, the transport authorities would not spare wagons for unwanted goods. The Government of Bombay therefore took the initiative and in February 1942 called a conference of the various interests associated with the cotton trade of Bombay. The interests represented were the E.I.C.A., the Cotton Buyers' Association, the I.C.C.C., the Bombay Millowners' Association, the Chamber of Commerce, the Indian Merchants' Chamber and the Marwari Chamber of Commerce. Considering the cotton interest at stake, one feels that the Ahmedabad Millowners' Association and the Karachi Cotton Association ought to have been given representation. Over and above these interests there were present the representatives of the C.P. and Bombay Government. It was thought at this conference that it would be desirable to alter the form of contracts for the coming season, i.e., for 1942-43 and to have no dealings in the new crop until the form of contracts had been modified. There were, however, differences of opinion as to whether there should be one hedge contract or more. But there was unanimity on one point and that was that hedge contracts must be modified to meet the changing conditions of the present time. It was then unanimously decided that the Board of the E.I.C.A. should appoint a committee which should recommend to the trade a revised scheme of hedge contracts workable under the present circumstances. Accordingly a sub-committee representing all sections of the trade was constituted by the E.I.C.A. under the Chairmanship of Sir Purshotamdas

Thakurdas, in February 1942. This committee expressed that the existing contracts were not only obsolete but also unworkable during the continuity of the war. They, in turn, sent circular letters¹⁴ to individual members of the Association inviting them to make concrete suggestions for a revision of the system of hedge contracts to suit the war conditions. It was further agreed both by the Conference and the Committee that the new system which might be devised should take cognisance of the then prevailing war situation and therefore such contract must be in force only for the period of the war and sometime thereafter, after which the trade should be invited to revise the system under the conditions then prevailing.¹⁵ The Government of Bombay accepted this view and gave a further understanding that they would not lay down any scheme of certificates for despatch of cotton tenderable under the new contract from the cotton producing centres after October 1942. The hedge contract sub-committee appointed a special sub-committee to formulate concrete suggestions and broad outlines of a revised scheme. The special sub-committee submitted their report in March 1942 wherein they unanimously suggested that to meet the exigencies of the war, a system of a single hedge contract might be adopted for Indian cotton. In formulating their proposals the special sub-committee took the following broad principles as a foundation—“(a) That a hedge contract is essentially an instrument of insurance to both the buyer and the seller, and should be so constructed and worked as to discourage the acquisition and or disposal of cotton through its medium, (b) that adequate safeguards should be devised within the framework of that contract to protect it against speculative manipulations especially in times of stress when unexpected developments both at home and abroad may encourage and accentuate such manipulations, (c) that a hedge contract should be well-enough balanced to afford an equal measure of protection and opportunity to both the buyer and the seller, (d) that a hedge contract should represent a fairly close relation to actual values of cotton.” These points were sound and just from the theoretical point of view and if properly observed in practice would place the system of hedge contracts in India beyond doubts and criticism. The sub-committee approved the above principles and accepted the system of one hedge contract for the duration of war and sometime thereafter. On 1st of May 1942, they submitted their final report to the Board of the E.I.C.A.¹⁶ After considering all the points and making necessary alterations and amendments in the by-laws, the E.I.C.A. gave their stamp of sanction, in June 1942, to the new principles and the scheme of hedge contract as propagated in the report of

¹⁴ No. A 1570 dated 25th February 1942 issued by the E.I.C.A.

¹⁵ Report of the Hedge Contract Sub-committee of the E.I.C.A. 1st May 1942.

¹⁶ With a view to give full force to the E.I.C.A., Government amended the by-law No. 1st and issued the order on the 24th April 1942 that “No person shall trade in the new crop in any year before such date as may be fixed by the Board with the previous approval of the Government of Bombay”.

the sub-committee. The revised scheme was then put forward before the cotton trade for their final adoption. For this purpose a meeting of the Association was held on the 14th July 1942 when the trade ultimately approved of the revised by-laws. The Government of Bombay gave their sanction without delay and the first transaction in the new contract was put in by the Chairman of the E.I.C.A., Sir Purshotamdas Thakurdas, on the 15th July 1942. It will be observed that motivated by a vague conception of the purpose to be achieved, the progress of the revision of the hedge contract system for Indian cotton was gradual, one might say evolutionary rather than revolutionary, constantly coming a little closer to the realisation of the end in view.

3. TECHNIQUE OF THE INDIAN COTTON CONTRACT.

The cotton trade, being by nature a very conservative body, is not inclined to accept any change in a hurry. But by instituting a new hedge contract called the 'Jarilla' or 'Indian Cotton Contract' in Bombay replacing all the previous contracts, and modifying the 4F Contract in Karachi, it has recognised the fact that periods of war are times of unusual stress and strain when bold and decisive steps are required to be taken to meet the exigencies of abnormal circumstances. The Jarilla contract appears to be one such step. For the proper working of the hedge contract system for Indian cotton this change was inevitable sooner or later and it has been hastened by the last war. The factors responsible for bringing about such a revolution in the Indian Cotton Trade are many, chief among them being: (a) loss of overseas markets and a consequential sharp fall in demand for short staple cotton in the season of 1941-42, (b) the difficult transport position in the country and a probability of its getting worse in future, (c) Government's intimation that transport facilities for non-essential goods may be severely curtailed in the near future without notice and that a situation may arise under which only such cotton may be brought into Bombay as is essential for export and or local consumption, (d) the fact that if the hedge contracts are permitted to function in the then existing forms, difficulties are likely to arise, particularly in the case of short staple contracts like Oomra and Bengal, and (e) sustained criticism of the then existing system of hedge contracts was being made from many quarters for a considerable time. This criticism was specially severe in connection with the Broach contract which required modification owing to deterioration in the staple length of the Broach cotton.

It is well-known that while the producers of some staple commodities have benefited owing to the great demand created by the war, the plight of the short staple cotton cultivator has been simply precarious. The outbreak of hostilities with Germany and the fall of France caused the Continental Markets to be cut off from Indian supplies. With the loss of the European markets consuming about 9 lakhs of bales of India's short staple cotton, the position of the

cotton trade was deteriorating during the year 1940-41. It became very serious early in the 1941-42 season when the full effect of Japan's entry into the war began to be felt. Japan's purchases from India, mostly of short staple cotton, amounted to some 1.5 million bales annually. The declaration of war by Japan and the resultant unfavourable developments cut off not only the market in Japan but also that in the Far East.¹⁷ This meant the entire loss of the export markets for the short staple varieties grown in India. On the other hand, it meant for all practical purposes that these qualities have to be either neglected or absorbed into the country itself. The total quantity thus affected came to more than two million bales comprising mainly of the short and fair staple cotton. But the Indian cotton textile industry was not expected to absorb more than a fraction of it. Though another small fraction might be absorbed by the United Kingdom and the U.S.A., this could not solve the problem of the disposal of these unwanted cottons. Hence, the situation caused a huge surplus of the 'orphan' cotton to be left as a drag on the Indian market. Since 1942, the grower of Indian short staple cotton has therefore been a source of great anxiety to the various Provincial Governments as well as to the specialised bodies like the Indian Central Cotton Committee and the East India Cotton Association.

All well-wishers of the Indian cotton grower were confronted with a two-fold question: (i) the replacement in whole or in part of the diminished foreign demand for our cotton, and (ii) the problem of inducing the cultivator to play his part by devoting more area to food crops. In view of the necessity and urgency of avoiding any further glutting of the Indian cotton market with short and fair staple cotton, I.C.C.C. recommended in January 1942 to the Central and Provincial Governments a reduction of 50% in the areas under such varieties. At the same time, it was suggested that food grains should be sown in their place. The specifications for goods required by Government were relaxed so as to enable more short staple cotton to be used in the manufacture of such articles. Simultaneously, a 'grow more food' campaign was started on a country-wide scale. In order to be able to further ease off the situation and to afford a measure of relief to the grower of these growths, a special fund known as 'the cotton fund' was created by the Government of India out of the proceeds of a temporary additional duty of one anna per pound on all imports of raw cotton. The object of this measure was not merely to steady the market, which was breaking through time to time, by making open purchases of the types concerned as occasion arose, but also to improve future prospects by assisting the farmer to

¹⁷ Table showing the annual exports of Indian cotton in thousands of bales:—

Year	Exports	Year	Exports	Year	Exports
1937	4267	1940	2340	1942	873
1939	3367	1941	2013	1943	500

(estimated)

switch over from short to medium and preferably long staple cotton. These measures together with the worsening of the transport situation and the immediate announcement by the Government of Bombay to the effect that movements of unwanted cotton to Bombay would be stopped had a considerable amount of the desired effect. On the advice of the Central and Provincial Governments a reduction amounting to 20% in the acreage under cotton was brought about in the season 1942-43, mainly by the substitution of food crops.¹⁸ A reference to the 1943-44 official forecast of the cotton crop in India also gives indication that the short staple crop in that season was less than the previous season by about 9 lakhs of bales or 39%. It is expected that the production of short staple varieties will be further reduced owing to the fact that conditions in the export trade and other factors affecting their demand have not materially altered even now.

In this way it will be realised that the problem of 'orphan' cotton had arisen largely out of the stoppage of export of cotton and the difficulty in moving it by rail or sea. The question puzzling Government for some time was whether it was possible to continue any form of hedge contracts in cotton. The principal remedy suggested was that some kind of change would be necessary if the cotton trade was to get through the difficulty. The Government's view was that the time had come for the trade and the industries concerned to consider whether it was not now necessary to modify the existing hedge contracts. A good many people made suggestions in that connection. But the Government's chief anxiety was to see that the system should be so devised as to assure the cultivator reasonable prices and at the same time afford legitimate traders reasonable hedge protection. With a view that the grower should get the best possible price for his cotton and that the cotton trade of India should be preserved in tact, the revision of the then system prevailing in India was most essential. This was accomplished as we have seen above by the institution of the Jarilla contract. Hence for the purpose of hedging and trading in futures there is at present only one futures contract for Indian cotton. In order to appreciate the principle and follow the implications of the Indian cotton contract it is necessary at this stage to understand its technique in almost all important phases embodied in the system.

The Indian Cotton Contract: Let us reproduce here the contract as it is in vogue today. The basis of the new contract is Fine Jarilla, staple 3 4" as per standard proposed from Jarilla cotton grown in Khandesh District. Cotton is tenderable up to two classes 'on' and one class 'off' for grade and up to 7 8" staple.

¹⁸ Press Note Re: Short Staple cotton. The Times of India dated 10th April 1943.
According to the final (April) forecast issued by the Department of Commercial Intelligence and Statistics, Calcutta, on 30th April 1943, the estimates of the area and the yield showed 16,812,000 and 4,554,000 respectively.

'On and off' values will be given for grade but for staple only 'on' values will be awarded. Other restrictions imposed on tenders of premium as well as discount varieties of cotton against the contract are that tenders of premium cotton should fetch $18\frac{3}{4}\%$ less than the premium fixed for that particular variety as well as for staple. Similarly, tenders of discount cotton should fetch $18\frac{3}{4}\%$ more discount for variety difference as well as for staple. However, the basic cotton is excluded from this restriction. In other styles class difference awarded in arbitration is not taken into account when calculating this handicap of $18\frac{3}{4}\%$. Descriptions tenderable are: (1) Jarilla—basis—(including Verum, Cambodia, Upland, Gaorani 6 cottons grown in Khandesh, Berar, Nizam Hyderabad, C.P., Central India, Gwalior and certain Rajputana States. (2) Broach, Surti (including Navsari) and Rajpipla cottons grown in Gujrat. (3) Punjab and Sind-American styles roller as well as saw-ginned from the Punjab and Sind Provinces. (4) Dholeras and Kalagin cottons grown in Kathiawar. (5) Cutch cotton grown in the Cutch State. (6) Western, Coompta, Upland, Bagalkot, Bijapur and Miraj cottons grown in the Southern areas. Standards are prepared and maintained separately for class and staple for the following:— (a) Jarilla—basis—from Jarilla cotton grown in Khandesh District (Verum, Cambodia, Upland and Gaorani 6 cottons from Jarilla districts to be surveyed against this standard), (b) Broach, (c) Surti (including Navsari), (d) Rajpipla, (e) 4f, LSS, and 289f, both Punjab and Sind styles and N.T. roller as well as saw-ginned (f) Dholeras, (g) Kalagin, (h) Cutch, (i) Upland (Southern), (j) Coompta (Jowari and Jaywant), (k) Western, (l) Bagalkot, (m) Bijapur, (n) Miraj. The following boxes are prepared for all these varieties:—Extra Superfine, Superfine, Fine (basis), Fully Good and Good to Fully Good (i.e., half a class 'off' Fully Good). Standards laid down for staple lengths are:— $3\frac{1}{4}"$, $13\frac{1}{16}"$ and $7\frac{1}{8}"$. It may be noted in this connection that cotton below the standard 'Fully Good' and $3\frac{1}{4}"$ staple length is liable to rejection. Months of delivery are all single and alternate beginning with January and lasting up to September, i.e., January, March, May, July and September. Crop of the current season alone is tenderable. An exception however is made in the case of the January delivery in which case 'Southern' of the previous season are tenderable.

Fine Jarilla $3\frac{1}{4}"$ as Basis: When the Broach contract was inaugurated the cotton crop of India ranged from 40 to 45 lakhs of bales. The staple length of Broach was nearly $3\frac{1}{4}"$ of an inch. It was then a fairly representative type of Indian fair staple varieties. But the composition and character of the Indian cotton crop have undergone a material change during the last 20 or more years. The crop averaged nearly 50 to 60 lakhs of bales a year. The production of staple cotton has increased. There is now a preponderance of medium and long staple cotton grown in India, i.e., varieties with a staple length of $3\frac{1}{4}"$ and over. This can be

seen from the following table" —

Staple Length Group	Government Tonnage		
	1939-40	1940-41	1941-42
	Thousand	Ton	of 400 lbs each
Long Staple over 1"	60	107	161
Medium Staple 7/8"	312	337	334
Short 1 7/8" to 1 1/2"	174	1734	2297
Short 1 1/2" to 1 1/4"	11	107	1160
Short 1 1/4" to 1 1/8"	110	111	1197
Short 1 1/8" and under	1017	122	956
	1981	2751	6025

It will be seen that the production of staple length 7/8" and above during 1941-42 formed 45% of the total against 36% in the previous season. Moreover a considerable deterioration has taken place in the staple length of Broach deshi cotton mainly due to the spread of the Ghoghari seed and it has come to be almost the same staple as the short staple Gomti. The basis of the Broach contract can therefore no longer be said to represent the bulk of the commodity that is actually grown in India. The cultivators and dealers in superior styles with better class and staple were anxious to see that their cotton was included in the hedge contracts working on the FIC A. For instance during the last few years a number of letters were referred to the LCCC and FIC A from the various sources like Khandesh Betal Nizam Hyderabad Bagalkot etc., demanding the inclusion of their respective growths in one or the other hedge contract in Bombay. Again consumption of Indian cotton in India has been increasing apace. It has nearly doubled at present advancing from 18.70 lakh of bales to more than 40.42 lakhs. A major portion of this consumption now consists of the medium and long staple cotton. All these facts prove, apart from the war conditions, that the time has now arrived when it is absolutely essential for our hedge contract system to take into account these changes. As a matter of fact it should be stated that there was an urgent need for a proper revision of the technique of the futures contracts. It is the most opportune and appropriate that the Indian cotton contract should have as its basis cotton catering for consumption by the domestic mills. The question with which the reformers were confronted was "What quality or growth should be taken to form the basis of the new contract?" Jarilla cotton secured their selection on the following merits — (1) area under cotton in Khandesh tract comprising of East and West Khandesh and Nashik Districts varies yearly from 10 to 11 lakhs.

19 Compiled from the Statistical Digest issued by the LCCC Revised figures for 1939-40 and 1940-41 total crop are 900,000 and 5,000,000 respectively.

of acres, constituting 1/5 of the area under cotton in Bombay Province and Indian States together. Out of this the general suitability of Jarilla for the Khandesh area is estimated at 7 to 8 lakhs of acres, i.e., about 75% of the total area under cotton in Khandesh. (ii) NV 56-3 known as Jarilla cotton is a selection from—*Gossypium Arborium* variety—*Neglectum* and has a staple length of 13-16" while the same of local cotton is 12", (iii) it has smooth feel, silky appearance and gives a spinning performance from 23 to 30 counts (warp), (iv) its ginning percentage is 35 and that of the local variety is about 36. It resists wilt and gives a high yield per acre.

It is said that the cause of depression in Indian cotton prices as represented by the Broach Contract was its basis which prescribed fair average staple of the season. This was an indefinite and vague term as every one in the trade had his own idea about such staple. It was therefore thought proper by an overwhelming majority to prescribe a definite staple length as the basis of a hedge contract. It was obvious that if a staple length of the basis cotton were prescribed the prices of all tenderable varieties would appreciate generally and the depressing effect on a particular contract would be removed to a certain extent. When judged in this light it will be realised that the present price level of Indian cotton seems comparatively healthy and intrinsically sound due to the minimum prescription of 3 4" staple as basis for the Indian cotton contract. In this connection it is interesting to note that the special sub-committee on the revision of hedge contracts had recommended 11 16' staple as basis. But the hedge contract sub-committee realised the danger of mixing Dishi cotton with Fine Jarilla that the acceptance of this recommendation would open and therefore increased the staple length to 3 4' for basis with full on allowance for 13 16" staple if tendered against the contract. It may now be hoped that the minimum staple requirement in the Jarilla contract will help the cultivator to realise his due by maintaining the price

[illegible]

Year	Area	Production
1938	1 050	11 111
1939	12 457	12 457
1940	70 071	70 071
1941	1 99 570	1 99 570
1942	3 89 700	3 89 700

level for Indian cotton at its equilibrium or intrinsic worth.

Delivery Period and Trading: It was suggested in 1935 that delivery period should be one month and each period should be consecutive, e.g. April, May, June, July, August and September for Broach. Another suggestion was that the Broach contract deliveries should be for every alternate month extending from December to October. The underlying idea was to ease off the concentration of trading of the Broach April-May position which was practically an eleven months contract. This concentration used to result in a huge accumulation of Mandi, Teji and straddle interests on this delivery position only. The hedge contract sub-committee of 1940 having visualised this drawback unanimously agreed and recommended that instead of double delivery months, a single month delivery period of 25 days should be prescribed. The Board accepted it and the amendments to the by-laws to give them effect were passed at an extraordinary general meeting of the E.I.C.A. held on the 7th March 1941 and forwarded to Government for sanction. The new contract has now given a practical effect to it by embodying a single month as a delivery period with the time ranging from the 1st to 25th of the current month. In other words the present contract has 25 days as tendering period, whereas the old contract had 55 days and this used to have a depressing effect on the general price level for Indian cotton. Hence the change was most desirable.

Again, though trading was not prohibited in any one of the old contracts during its delivery period, the new contract prescribes that no fresh trading during the delivery month is permitted after the seventh day of that position except for the purpose of squaring long and short transaction against it.²¹ This is just in compliance with the practice available in other countries. This innovation has its own history behind it. It was suggested that during the delivery period transactions in a contract for that position should be prohibited, i.e. during the months of April and May transactions in the Broach April-May position should be prohibited. Another suggestion was that as soon as the delivery period commenced no sale should be made without covers.²² The East India Cotton Association liked the idea and the Board accepted it. The procedure followed in practice is that members should submit their Instruction Forms to the Clearing House on the first day of every delivery period giving details of their open purchase, and sales for delivery of cotton during that month. Members who have open contracts for delivering cotton during the month should submit a dummy delivery order to the

21 By Law No. 50C(ii) "Any person who contravenes the provisions of this sub-clause shall be liable in addition to all other penalties to such penalty, not exceeding, Rs. 50/- per candy as the Board shall fix".

22 Cf. "That short sales i.e., sales without cover of actual tenderable cotton under contract during and delivery period of a hedge contract be prohibited".

Report of the Hedge Contract Sub-Committee, 1940.

Clearing House on the first day of the month. The Clearing House should pass on such delivery orders according to the instructions given by members in their Instruction Forms and find out the last buyer. As soon as the work of passing on of delivery orders is completed and the last buyers' names ascertained, the Clearing House should notify the number of delivery order, name of the seller and the name of the last buyer in respect of each such tender. After the posting of the notice *Pacca* delivery orders should be allowed to be issued by members in respect of the dummy delivery order and the same should be passed on by the Clearing House to the respective last buyers previously ascertained. In order to avoid fear of the longs being called upon to take up 100% of the delivery orders against their purchases at any time, it is laid down that delivery orders should be distributed *pro rata* amongst the buyers so that they may not have to rush in to liquidate their purchases before delivery period starts. For example, if the long interest is one lakh of bales and orders issued are ten thousand bales, every buyer receives 10% orders against his long interest and not more. Thus the new contract inspires confidence among the buyers who instead of being scared away from the market have now to take delivery of only certain percentage of their long position from time to time.

Fixation of Difference between Standards: Under the Jarilla contract, cotton of the varieties included in basis from 3 4" up to 7 8" and up to two classes 'on', i.e., up to Extra Superfine is tenderable at the current premia. Other varieties are tenderable not at the full current premium but at a discount of 18 3 4% of it. For example, if the tendering difference between standards is fixed by the special committee at Rs. 10 - 'on' the basic cotton and if the final award in arbitration is 1 16" 'on' for staple and if the 'on' allowance for a staple of 1 16" over the basic staple length of 3 4" is fixed by the special committee at Rs. 20 - 'on' then in the Delivery order tendered to the Clearing House, the variety difference would be mentioned as Rs. 10 - 'on' less 18 3 4%, i.e., Rs. 8 2 - and in the arbitration award the 'on' allowance for staple would be mentioned as 1 16" 'on', i.e., Rs. 20 - 'on' less 18 3 4%, i.e., Rs. 16 4 - Therefore the tenderer of premium cotton, instead of getting Rs. 10 - 'on' for variety and Rs. 20/- 'on' for staple, i.e., Rs. 30 - in all 'on' per candy, would get only Rs. 24 6 - 'on' per candy. Similarly, if the tendering difference between standards is fixed by the special committee as Rs. 10/- 'off' the basic cotton and if the final award in arbitration is 1 16" 'on' for staple and if the 'on' allowance for a staple of 1 16" over the basic staple length of 3 4" is fixed by the special committee at Rs. 20 - 'on' then in the delivery order tendered to the Clearing House the variety difference would be mentioned as Rs. 10 - plus 18 3 4%, i.e., Rs. 11 14 - 'off' and in the arbitration award the 'on' allowance for staple would be mentioned as 1 16" 'on', i.e., Rs. 20 - 'on' less 18 3 4%, i.e., Rs. 16 4-. Therefore

the seller of discount cotton, instead of getting only Rs. 10/- 'off' for variety and Rs. 20 - 'on' for staple, i.e., Rs. 10/- 'on' per candy would get Rs. 40 - 'on' per candy. This is a very desirable and much needed reform. Again, it is in consonance with the practice available in the American sister markets like New York. In fact, the theory of hedging is that a futures contract should discourage giving or taking of delivery against it. The one way to follow this in practice is to impose restrictions on tenders of premium as well as discount varieties of cotton against futures contract. It was suggested to the Board of the E.I.C.A. in 1938 that all cotton other than basis should be tendered at 'on' or 'off' in the different contracts which would be fixed by the Board on percentage basis. The bone of contention was that fixing of the maximum percentage which the seller of superior variety of cotton should get by tendering it under any contract should be restricted to a certain figure and it should not be open to the holder of cotton if he wished to tender superior variety to get anything more. Further in cases of corners or bear raids, on account of pressure for selling superior cotton, the value of the basis of the contract is also reduced. Therefore, while the total quantity of cotton tenderable under the hedge contract should tend to be reduced to a safe figure, sellers should not be materially handicapped on that score as they would be able to dispose of their cotton in a ready market if they found that the premium obtainable in futures was inadequate considering the quality tendered. A probable objection to this is that superior varieties would in effect be debarred from being tenderable against the contract. It may however be said that having regard to the constitution of the old Broach contract cottons of highly varying values were being tendered against it with the result that buyers were scared away from taking delivery of cotton thereunder. In order to induce buyers to operate in futures more freely and at the same time to continue to give to the seller the right of tendering superior cotton, the present scheme has been devised. In New York tenders of cotton of longer staple and better grade than the Middling basis 7-8" are allowed but with a discount on the premium. This helps to discourage tendering of superior varieties of cotton against the contract. Better varieties known as 'other descriptions' should be tenderable at fixed difference less a definite percentage because all growths of 'on' allowances carrying premia act as a sort of weightage to prevent the contract from unnaturally soaring too high. Another objection to be met with is that it may affect the grower of superior varieties of cotton. But it should be pointed out that this fear is groundless, since the grower of superior varieties could very well dispose of his cotton in the spot market at a higher premium. In fact, the object of discount is to make the contract attractive to the buyer. Owing to different qualities of cotton varying widely in price being made tenderable under the old contract, the pressure on it was so great that the price of the basis used to remain depres-

sed to a certain extent and there being no certainty as to what particular type of cotton the buyer might receive in tender he hesitated to take delivery. As the buyer was scared away that factor reacted unfavourably on the price level for the contract. The conditions responsible for the lower price level of Indian cotton should be remedied. One of the most effective steps in this direction is to place a handicap on the tendering of superior varieties of cotton. The result would be that the growers of cotton including those growing superior styles would on the whole get better prices than they are likely to get without such handicap, inasmuch as the loss in the premium would be more than compensated by the contract becoming popular and resulting in appreciating of the price offered for the basic cotton. It may therefore be observed that the present innovation of 18 3/4 discount is in the right direction.

War Provisions: In addition to the above changes a number of provisions have been incorporated in the new contract to meet the then existing transport and war condition. These alterations refer to (1) options given to buyers and (2) powers vested in the Board. (a) An option to demand upcountry delivery and (b) a right to buy on account of a seller fall under the former while (c) powers to fix spot rates in the case of bear raids or bull manipulations and (d) settle price in the case of emergency come under the latter.

(a) **Up country Delivery:** Under normal circumstances the contract stipulates delivery in Bombay. But it is possible that a seller may have cotton lying in a remote area and yet he may be unable for no fault of his own to bring it down to Bombay and tender cotton in fulfilment of his transaction. With a view to mitigate the hardships under the shortage of wagons the buyer is given the option to demand delivery upcountry. If a buyer elects to exercise the option he should state so in the Instruction Form to be submitted to the Clearing House. The procedure laid down is that the seller has to notify to the buyer within 24 hours from the instruction by the Clearing House the place upcountry where the cotton will be tendered provided however that the seller may instead of informing the last buyer of the place tender a Railway receipt or a bill of lading covering the tenderable cotton consigned to Bombay. If he fails to do either of these things the cotton shall be invoiced back by the last buyer at the spot rate with a penalty of Rs. 25 - per candy. Further in the event of the buyer taking delivery upcountry, he is entitled to receive from the seller reasonable charges incurred in that connection e.g. railway freight, cartage, octroi, etc. If cotton is to be delivered upcountry, it should be protected under cover and necessary facilities for sampling as well as storing until the buyer is in a position to remove it should be afforded by the seller. In return for this obligation the seller is given a latitude of delivering cotton from any of the

scheduled places situated in India.²³

(b) Right of Buying on Account of a Seller: The right of buying on account of a seller was first introduced in India by the Cotton Contracts Board in 1920. It remained in force until that body ceased to function in 1922. The E.I.C.A. withdrew it subsequently. Since then there was a feeling amongst certain sections of the trade in favour of its restoration. But it was not until 1934 that this feeling took a definite form in the shape of a representation to the Board of the E.I.C.A. On its consideration the Board agreed to restore the right of buying on account. The by-laws were accordingly amended and approved at the general meeting held in April 1935. Government gave their sanction to them in February 1936. This right remained in force during the seasons 1936-37 and 1937-38. A requisition for its removal had been made in May 1937 stating that a new set of conditions had been introduced in the trade. The Board convened an extraordinary general meeting where a note that this right might be done away with was sounded. Eventually, a resolution for the withdrawal of the right of buying on account of a seller was carried out in February 1938 and the respective amendments received a sanction from Government in April 1938. Since then, the position was that the buyer had either to take the cotton with allowance awarded or to reject it and invoice it back to the seller. One of the main fears entertained by some was that the giving of this right to the buyer would create unnecessary disputes inasmuch as a buyer might pay a higher price for cotton bought on account than the rate fixed by the Daily Rates Committee and a seller would have to pay such high prices. This can be dispelled by inserting a proviso that cotton should be bought within certain maximum range of prices, say, 6½ to 10% higher than the spot rates. But to comply with the requirements of a hedge contract, this right of buying on account is found by experience to be desirable and indispensable in the interests of the cotton trade as a whole. It is gratifying therefore to note that by restoring this right under the new contract, an attempt is made to establish readjustment of privileges and responsibilities of buyers and sellers of a futures contract.

(c) Special Provisions against Manipulations: In the past, and even recently, there have been several manipulations known in the trade as either a 'squeeze', a 'corner' or a 'bear' raid. The method adopted for overcoming such a situation is that should the Board receive a requisition signed by 50 members or more that either the 'corner' or 'bear' raid exists, the Board should call a meeting of the general body. In case the general body by a simple majority decides that the 'squeeze' or 'corner' has occurred and until it decides that such a situation has ended, (1) discount of 18 3/4% on 'other descriptions' will be discontinued and (2) penalty provisions of 'default in delivery' will cease to operate. If the 'bear

²³ Notice issued by the E.I.C.A.: 16th January 1943.

raid' has taken place, until it has ended, (i) the discount of $18\frac{3}{4}\%$ will be raised to 25% and (ii) a buyer will have the additional alternative right to buy on account of a seller in cases of 'rejection of tenders' and 'default in delivery'. Under both these circumstances, the Board is given a further important leverage of fixing spot rates of all cottons bearing especially in mind: (a) rates ruling in upcountry centres, (b) rates for similar growths and (c) rates for subsequent deliveries.

(d) **Emergency Powers Vested in the Board:** The last, but not the least, important change in the contract relates to emergencies which might arise due to the war, e.g., evacuation of the city, etc. In such a situation, the cotton trade is likely to be dislocated and the trading in futures may be rendered difficult if not impossible. If the Board therefore feels that as a result of the war, a state of emergency exists and if the Government of Bombay concur, they may fix prices at which futures transactions should be closed out. Further, in the case of an emergency, the requirements of the quorum for the Board is to be dispensed with and such rates as might be fixed by them should be effective, subject to the sanction of the local Government.

It will be noticed that these are special war provisions which take into account the existing abnormal transport situation as well as the probability of emergency arising out of internal or external conditions in the trade. Although all the above provisions are incorporated to cope with the requirements of the present times, one cannot but feel, that in view of their practical utility, the continuance of some of them even during the post-war period will be of lasting benefit to the cotton trade and industry of the country.

4. MERITS AND LIMITATIONS OF THE JARILLA CONTRACT

Having traced the genesis and analysed the technique of the new contract for Indian cotton, we are now in a position to assess the merits and drawbacks of the Indian Cotton Contract.

Special Merits of the Jarilla Contract: If a comparison is attempted between the Jarilla and Broach contracts, it will be easy to appreciate the value and practical utility of the existing system of hedge contract. On perusal of the constitution and composition of the two contracts, one finds that the new contract is far superior in its technique and has a number of special advantages over the old one. At the outset it should be noted that there are more points of contrast than those of comparison between the Broach and Jarilla contracts. Again, there are quite a large number of special provisions in the new contract in comparison with the old one. In the first place, so far as the basis is concerned, it may be stated that Fine M.G. Jarilla is an advanced step in the right direction since in the case of the Broach, the basis was simply Fully

Good M.G. Broach. The theory is that the better the grade the higher the value of the contract and vice versa. Fully Good was relatively an inferior grade which restricted the scope of tenderable descriptions, for, grades tenderable under the Broach were up to Super-fine only. In consequence, better varieties had to suffer. At the same time, lower cotton up to Good which was very low grade and deserved discarding was recognised as a tenderable quality. Both these limitations of the old contract are done away with under the new contract. The Jarilla increases the scope for better varieties by allowing on one hand the grades up to Extra Super-fine to be tendered and on the other hand by directly discouraging the lower grades like Good or Good to Fully Good. This is likely to help the trade to establish efficiency in matters of picking, ginning and pressing of cotton. Thus the innovation of Fine as basis is very sound and is bound to have a good effect on the whole. Next in importance is the basic change in the direction of staple length. Under the Broach the clause of the 'fair average staple of the season' had a demoralising effect on the entire crop of the country. The very notion of the 'fair average' varied with individuals and the human factor played at times havoc both in the survey and trade practice. There being no stipulation regarding staple, no allowance was to be given for better staple varieties in tender. The old contract was in fact a mixture of both. A minimum staple length was prescribed for certain varieties, and there was no definite prescription in some cases at all. As a result, it tended to put premium on mixing. Mal-practices were being encouraged openly.²¹ The new contract, on the other hand, lays down the minimum basic staple length as 3 4" and encourages the superior staple varieties to be tendered at their intrinsic value up to 7 8". It not only does away with the idea of the 'fair average' but also definitely prescribes that cotton below 3 4" staple is liable to be rejected unless of course the buyer is willing to accept it upto 11 16" at full discount. The idea of giving buyers the option to accept upto 2 32" below the minimum limit of 3 4" seems to be that if the class is better the seller should not be punished severely or that if the buyer needs cotton his choice should not be unduly restricted. Two fundamental facts are recognised in this option to the buyer, firstly that buyer is the best judge of his interest and secondly that climatic vagaries should not be neglected totally. Again, the Jarilla contract gives a definite fillip to the cultivation of longer staple cottons in India. While praising the present contract some people go to the extent to say that it is a staple cotton contract and as such a much better one than India ever had in the past. This is rather an exaggeration. It should however be said in the fairness of things that the Indian cotton contract does recognise the fact that India is now becoming a grower of medium and

²¹ Mal-practices and mixing were legally sanctioned by the by-laws of the F.I.C.A. because of the clause of the 'fair average staple of the season' as basis in the Broach Contract.—Personal talks.

long staple varieties in place of only short staple cotton. In the third place trading months are all single with delivery period of 25 days for the new contract and this is likely to reduce unhealthy concentration of trading in any one position which was not the case with the old contract. Under the Broach there were double trading months with delivery period being extended for 55 days which had an adverse effect on the general price level for Indian cotton. Further, the Broach had only two positions for the purpose of hedging as well as for speculating. The Jarilla overcomes this great obstacle and gives a fairly large number of trading positions extending from January to September which comes to about nine months in any one season of the cotton crop. Another welcome change relates to the varieties tenderable as 'other descriptions'. The old contract was composed of varieties widely varying in values and there was practically no correlation in its constitution. The best as well as the unwanted growths were tenderable against the Broach under the shield of 'other descriptions' and the differences fixed used to vary at times from minus points to Rupees hundred or more. The resultant effect was most depressing in absence of any body coming forward as a buyer, though the weight at the back of the contract was hardly 15 lakhs of bales.²⁵ The new contract carries the weight of 30 lakhs of bales behind it and yet tries to maintain as far as possible the best correlation between the tenderable varieties. It should however be said that this benefit is derived more or less from the fact that the Jarilla gives importance to the staple stipulation which the old contract failed to do, e.g., premium obtainable for other descriptions under the Jarilla varies with 'premium varieties' and 'discount varieties' in matters of staple lengths at the discount of 18 3/4" more and less respectively. Moreover, the requirement of the staple length of 3/4" as the basis marks a line of demarcation for a number of styles which were otherwise be tenderable in the past. In consequence, a uniformity is now more likely to be achieved and maintained under the Jarilla. Besides, the new contract takes into account the following factors while fixing the tenderable differences as well as spot rates, viz., (a) rates for ready cotton prevailing in Bombay, (b) rates ruling in upcountry, (c) rates for similar growths and (d) rates of succeeding deliveries. On the contrary, the old contract did not take into consideration any of these factors except the first one for fixing spot rates. The effect of this was the wide gap

25 Table showing estimate of the cotton tenderable against the new hedge contract:—

Description.	Bales.	Description.	Bales.
Jarilla	6,00,000	Bagalkot & Mutai	75,000
Broach Farm	3,50,000	Westerns	1,50,000
Dholeras-Kalagin	1,50,000	Sind/Punjab	
Jowari	75,000	American	10,00,000
Jayawant	1,00,000	Cambodia	2,55,000
Upland	50,000	Karanjanni — Tinnevelly	1,65,000

Total tenderable cotton against the I.C.C.: 29,70,000.

in the 'normal spread' between the spot and futures prices as well as between the price levels prevailing in the Central and primary markets. It is now hoped that under the new contract, since a due consideration of all the prime factors is provided for, the 'normal spread' will not be much disturbed in future. Of equal importance is the modification of the clause relating to 'rejection of tenders'. Under the Broach, no full allowance was to be stated but the award simply mentioned very arbitrarily the phrase of 'justifying rejection' at the option of the buyer. In that event the buyer had two courses open to him; namely, he might reject and invoice²⁶ back cotton without any penalty to be paid by the seller or he might weigh over with the allowance awarded. While, under the Jarilla, full 'off' allowance must be clearly stated in the awards and again it must state separately allowance for class, staple, and the length of staple, e.g., tendering differences between standards as well as 'on' allowances for staples of 1/32", 2/32", 3/32" and 4/32" above the basic staple length of 3 1/4" for all varieties are to be fixed in advance.²⁷ In the case of cotton which is liable to rejection for grade or staple, i.e., if cotton is more than one class 'off' or less than 3 1/4" in staple and is more than one and a half class 'off' and not under 1 1/16", it is at the option of buyer to reject or accept the same. If he elects to reject cotton and invoices it back, he is entitled to a penalty of Rs. 3/- to be paid by the seller, otherwise he may weigh over the cotton with full allowance awarded. Thus the new contract gives slightly better facilities to the buyer. The motive behind this clause is to attract more and more buyers who used to be scared away in the past. It is inserted also with a view to discourage indiscriminate tenders or retenders of cotton. This goes to make the tone of the cotton price level a little bullish and more steady as well as healthy. In addition, a provision is made for the constitution of a Super Appeal Committee. Its only function is to decide about the staple of the cotton tendered. To see that the Super Appeal Committee is availed of as a last resort only the fee for a Super Appeal is kept a bit high at Rs. 250 -. Further a great reform is wrought in the field of speculative manipulations. The real weakness and defect of the old contract was in connection with the defaulter. In fact, one used to hear so often in the past, that the Broach contract encouraged default in delivery and thereby facilitated sellers not only from throughout India but also from foreign countries to come and sell in the ring of the E.I.C.A. It is very difficult to deny this charge entirely. There was an element of truth in it. It was laid down that in the case of default in tendering on the part of a seller a buyer should invoice back at the spot rate with a maximum penalty of Rs. 25/- per candy from the

26 If the buyer invoices back cotton which is more than a 'class and a half off' the seller becomes liable to a penalty not exceeding Rs. 25/- per candy if so awarded by the Appeal Committee.

27 Cf. Notice issued by the I.I.C.A. on 22nd February 1943.

seller. The result was that the seller sometimes preferred to pay the penalty and shirk the responsibility to his own benefit. The buyer had no other remedy but to accept the penalty and put an end to the dispute. In practice the sellers used to sell and sell short knowing full well that if they are not able to cover they will pay the penalty and escape. But the far-reaching feature of the Indian cotton contract is the special provisions that are devised against manipulations which did not exist so far. The Jarilla has tried to remedy the situation as far as it is practicable. The buyer is given the discount of 25% on other varieties instead of 18 3/4% and the additional alternative right to buy on account of the seller in case of bear raids. In the event of 'bull' manipulations, the discount of 18 3/4% on 'other varieties' is to be discontinued and penalty provisions of 'default in delivery' should cease to function. Another innovation was necessitated by the shortage of wagons. A genuine seller is given relief in that a penalty for 'default in delivery' under such circumstances has been reduced from Rs. 25 - to only Rs. 7/8/- per candy. Finally, the present contract being a war measure gives emergency powers to the Board to fix prices at which all forward contracts may be closed out. These are some of the principal and invaluable merits the Indian cotton contract generates provided it functions in a free market unhindered by rumour-mongers or Government control.

Its Weak Points: In spite of so many special advantages, the Jarilla contract is not free from its limitations. A section of the trade has struck a note of warning against the embodiment of certain reforms in the hedge contract system for Indian cotton.²⁸ Objections are raised by various shades of opinion from their respective angles of vision. Notwithstanding the good features noticed above, the working of the new contract has revealed a number of weaknesses in it and some of the members have felt that these must be set right at an early date. The directions in which changes immediately required are mainly two: (1) the basic staple length and (2) the system of fixation of differences. Regarding the first, it is stated that Jarilla 3 4" is the cotton which simply does not exist.²⁹ The 3 4" was in fact only a compromise between the demands of two sections of the cotton trade; brokers wanting 11 16" and merchants 13 16". To satisfy both the sections an arithmetical average was finally evolved. The 3 4" is possible only by mixing Jarilla and Deshi varieties. The new contract with its basis as 3 4" staple cotton is regarded as putting a premium on mixture and thereby perpetuating the very evil that was sought to be remedied when the Broach contract was scrapped. The argument is that the contract should represent natural cotton and this

²⁸ 'I do not consider the present Indian cotton contract as a balance contract in that in an anxiety to keep the price of the contract high as was supposed to be not the case with the Broach contract, the Indian cotton contract has been too much weighted in favour of the buyer —Reply to a questionnaire issued by us

²⁹ Capital: 11th March 1943 and Commerce: 6th February 1943,

can only be done by laying down the basic staple for Jarilla cotton as 13/16" minimum. Similarly, it is stated that there is no such description as 3/4" N.T.L.S.S. or 289F. cotton. Therefore, the minimum staple length should be substantially raised. The staple length for Surti including Navsari cotton should also be increased. As regards the new system of fixing differences, it is said that the old system was much better and more desirable from the practical point of view. The system was the commercial one and the differences were fixed from day to day, i.e., differences were decided from the daily spot rate quotations as opposed to the present system of periodical fixation of differences lasting for the entire period for delivery. Under the existing contract premia or discount for 'other varieties', i.e., tendering differences and 'on' allowances for staple higher than 3/4" to 7/8" are to be fixed for the whole delivery period about the 25th day of the preceding month by a special committee. This is regarded as a most deplorable step since it is going back to the primitive and unpopular system. This system has a tendency to accentuate the trend of prices on both the sides, downward as well as upward. The system of fixation of differences under the new contract is therefore calculated to injure the interests of the cotton trade in general. There is another objection. It is in connection with the prohibition of trading in futures during the delivery period. A difficulty experienced in practice due to this relates to the fixing of 'call' cotton. The great hardship arises in the case of cotton being sold or bought on sellers' or buyers' call. The point to be considered is whether it is open to a seller of actual cotton who has sold his cotton 'on call' and sold the futures contract simultaneously to keep the sale open till the last but one day and buy it back from the market when his buyer wants to fix the price of such cotton. In this connection it is said that unless a permission is given there will be considerable hardship in respect of dealing in futures. Again, the real trouble will arise in case of sellers' 'call' when the buyer has bought futures contract and becomes liable to receive tender if the fixing of 'call' is delayed. It is therefore demanded that the by-laws relating to this should be amended making it compulsory on buyers and sellers of 'call' cotton to fix their prices before the delivery period commences.

It is well to remember at this stage that it was admitted by all when the Indian cotton contract was instituted that it is in the nature of an experiment. In fact, no one has claimed that the present scheme of hedge contract can be said to be perfect. On balancing the special merits against the weak points mentioned above one feels, however that although the Jarilla contract has not been rendered as perfect as it could have been, it is much better in constitution and far superior in technique than the old Broach contract.

Remedies: With reference to the above limitations, we venture

to suggest the following remedies to perfect the new contract:— The minimum staple length is an all-India and all-important point. The present $3\frac{3}{4}$ " for Jarilla may be regarded as too low on the ground that a pure Jarilla cotton is at least $13\frac{1}{16}$ ". $3\frac{3}{4}$ " Jarilla cotton may therefore become a mixture of 'Deshi' and tend to encourage mixing deliberately Jarilla with Khandesh in order to bring down the staple to $3\frac{3}{4}$ " or $11\frac{1}{16}$ ". In support of the contention that $3\frac{3}{4}$ " of the basic staple length of the Jarilla cotton will encourage mixing, it may be pointed out that the technological Reports on Standard Indian Cottons show staple length of Jarilla cotton to be nearly $7\frac{3}{8}$ " over a period of 6 years. According to Graders' report, its staple length varied from $13\frac{1}{16}$ " to $7\frac{3}{8}$ " during 1940-41. Taking all these considerations into account it would be desirable to increase the basic staple length for Jarilla cotton to $13\frac{1}{16}$ ", permission being given to seller to tender up to $3\frac{3}{4}$ " at the usual discounts.³⁰ With a view to avoid the repetition of the mistake of the old contract on one hand and to keep the new contract as a staple contract on the other, this change should be effected without delay. By doing so many benefits will accrue. The character of the Indian cotton crop will decidedly tend to come up and a greater quantity of long staple cotton will be produced from year to year. Requirements of the domestic Mills will also be more easily complied with. At the same time, by an upward revision of the basic staple tenderable, differences between arbitration, appeal and super appeal results will be much narrower. Referring to the fixation of differences, the question is as to how the spot rates for different growths of cotton tenderable against the new hedge contract should be fixed during the delivery period. It is evident that the purpose of fixing tendering differences and 'on' allowances is to enable the parties to know what premium or discount in relation to the basic cotton subject to the handicap of $18\frac{3}{4}$," would be applicable if 'other description' are tendered through the Clearing House. But as the differences so fixed would be arrived at after taking into consideration the prices in spot, interior and succeeding deliveries, they would not coincide with the rates actually ruling in the market during the delivery period in respect of 'other descriptions'. Further, the spot rates for such cotton would fluctuate during the delivery period according to the law of supply and demand. Since the rates so fixed and registered by the Association become effective for the purpose of invoicing back, the trade may require such spot rates for 'other descriptions' as may be ruling in the market from day to day. Taking these various aspects of the question into account, we suggest that while the spot rate for the basic cotton during the delivery period of the hedge contract should be fixed subject to the leverage provided in the by-laws, the spot rates for 'other descriptions' may continue to be fixed daily in normal times according to the actual ruling rates

30 Cf. "That the basic of the hedge contract should be changed from $3\frac{3}{4}$ " to $25\frac{3}{32}$ " Jarilla".—Report of the Cabinet's Committee; April 1947; p.5

in the spot market for such cottons. We feel that the adoption of this procedure would obviate any difficulty that may arise as a result of the rates for 'other descriptions' being registered on the basis of tendering differences fixed by the Special Committee under the present by-laws.

But this is not all. Another consideration is that now the war is over. A fairly reasonable time thereafter has also lapsed. Hence, the pledge of revising the system of cotton futures is due to be executed by the authorities concerned.³¹ No doubt, the cotton grower, the trader and the manufacturer would not like now to put up with the war-time measure and continue to carry on with the existing system. What they would welcome is a sound scheme of hedge contract designed to meet their normal requirements. Thus the issue with which the various cotton interests in India are confronted at present is the thorny question of devising a thoroughly comprehensive and most scientific system of hedge system for all the principal varieties of Indian cotton. Though it is an embarrassing problem, it must be borne in mind that the new structure of the system should be so constructed as to neither jeopardise the interests of the buyer and the manufacturer nor those of the seller and the grower of Indian cotton. While the I.C.C. embodies in it a large number of good points, it is not free from certain loopholes and pitfalls. It is suffering from the lack of comprehensiveness and uniformity. The Jarilla contract covers at the most about 3 million bales of cotton and provides for hedging facilities only to the staple varieties produced in our country. The result of its working is that the rest of the descriptions cultivated in India are neglected since the system does not make any effort of providing a hedging facility about them. The cultivators and consumers of these growths suffer in consequence. The alternative before the growers and consumers of those styles which do not find a place in the existing system is either to give up the production and consumption or face the speculative situation. On account of the geographical factors and commercial considerations it is rather difficult if not impossible to discontinue the production and consumption of the uncovered varieties. Instead of expecting the producer to switch over to the production of better varieties of cotton and the consumer to resort to substitutes, it is much more desirable and practicable to reorganise the system and make a definite provision in it to cover up and include all the principal varieties of Indian cotton.

Again, on an average India used to produce annually 5 to 6 million bales of cotton right up to 1942. Since then the annual

31 "The Committee is of the opinion that the present time is not opportune for considering a change in the major basis of the contract."—Report of the Cabinet's Committee on the Control of forward trading in Cotton in the Bombay Province: April, 1947; p.5. It seems that the Committee lacked sufficient data on this issue.

production has gone down to about 4 to 5 million bales. Of these roughly 3 million bales are covered by the I.C.C. But the question is what about the remaining 1 to 2 million bales? Should they be regarded as "orphans"? Even the so-called orphan cotton can now hope to find the lost outlets in foreign markets. In fact one should not be surprised if in the near future one finds the revival in the production and consumption of those styles. In these circumstances, it becomes imperative to overhaul the existing system by taking cognisance of the rest of the descriptions which are and which will be produced in this country. With a view to making the system comprehensive and thoroughly scientific scheme it is not only essential and desirable but also in the interest of the trade in general that there should be a system of two hedge contracts in Bombay for Indian Cottons. They may be styled as (1) staple contract, (2) non-staple contract for Bombay. This system would cover and protect all the main varieties of cotton produced and marketed in India. It is needless to say that if these suggestions are carried out the system of hedge contract for Indian cotton will tend to work for the benefit of those for whom the futures market in cotton is maintained inasmuch as the staple and non-staple contracts in Bombay will cover all the commercial varieties of our cotton. Cotton which used to pass under the name of "Bengal" will be amply provided for in the contract to be workable now only in Karachi. Such a system will then have a reasonably fair chance of becoming permanent and effective in its working to the satisfaction of all concerned with and interested in our cotton.

Of course the difference of opinion as to the number of contracts in a system of hedge or futures in cotton is bound to prevail as it has been done in this case for the last so many years. But the well-informed and more enlightened section of the commercial community should now come forward and cement this difference once and for all by adopting a system which should go a long way to achieve the largest good of the largest number. We therefore feel that the time has now come when the authorities should not hesitate in giving a proof of their courage of conviction and boldness of action by implementing the required and desired changes in the system at the earliest moment. It may be observed that for the last 30 years or more the method of "trial and error" has been followed with the result that the system of hedge contract for Indian cotton continued to drift on without arriving at any concrete structure of a scientific scheme of futures and that for one reason or another it has not been found possible to render the system free from doubts, suspicions and misgivings till now. The time is therefore now most opportune for reconstructing, revising and reorganising the entire structure of the system for Indian cotton in such a way as to make it perfect in all its aspects and phases and

suitable for the many-sided requirements of all the sections of the trade. Such a system should be able to ultimately stand the test of all fundamental principles of the theory of futures trading in an agricultural commodity like cotton.

5. CONCLUSION

From the foregoing study of the hedge contract system for Indian cotton, it will be observed that the Indian Cotton Contract introduces a number of new ideas. It is a radical and revolutionary departure from the old system. The old contracts were introduced during the first world war. The contracts evolved since 1918 were based not on the cotton which India consumed but on the varieties required by foreigners like Japan and others. It is admitted on all hands that though they served the trade for the 25 years or so, they failed to meet the changed conditions. Having regard to the changed conditions due to the war, the collapse of the export trade in short staple cotton, and the difficulties of transport, the view expressed was that it is very desirable to stop trading in any hedge contract which has tenderable against it short and fair staple cotton and to devise a new system of contracts of staple varieties mainly consumed by our Mills. The opinion seemed to be that if this is done, despite the transport difficulties and the collapse of exports, it was possible to continue the hedge contract system in India.³² Hence the cotton trade was compelled once again under the shadow of war conditions, to try in entirely new system. This system was to remain in force during the period of war and for a reasonable time thereafter. The amendments, additions and omissions in the rules and regulations which are incorporated in the existing by-laws of the E.I.C.A. thus embody in them the genesis of the Indian Cotton Contract. All these stages serve to emphasise the evolutionary as well as the orderly process which mark the gradual development of the present form of futures contract in Bombay. Again, it is recognised in the Jarilla contract that India is an important grower of staple cotton of 3 4" and higher in the world. This contract will definitely act as an incentive to the production of medium and long staple cotton instead of short staple growths in the country. It may be hoped that this contract when modified will leave behind it advantageous traces in the system so as to benefit all—the grower by enhancing the value of the product of his farm, the consumer by catering the requirements of the local industry and the merchant by giving the sound and perfect system of hedging badly needed by the trade.

There is a difference of opinions in the cotton trade and industry

³² Cf.: "There is unanimity of opinion that the hedge contract is necessary for the marketing of the cotton in ordinary times. During the time of war, when the international value of cotton cannot be ascertained, the hedge contract is even more necessary than in ordinary times. At the same time, looking to the present conditions of the cotton trade, a modified form of contract is required. Hence the revision should meet the war conditions".—Personal interviews.

as to whether there should be one hedge contract or more. But there is unanimity on one point that the system must be modified to meet both the changing conditions of the Indian cotton crop and the trade. The problem of modifying the system is however by no means an easy one. As a matter of fact, it may be said that no system of hedge contract for Indian cotton could be designed which would be universally satisfactory. The task of devising a system capable of coping with widely varying interests represent probably the hardest nut to crack. Our feeling is that the formulation of a well-balanced, equitable and satisfactory system is a difficult and delicate problem. However, if we are to record our first impressions which we have gathered from a first hand information while making a personal investigation we have come to believe for our part that the Indian Cotton Contract makes a sincere and bold attempt to diagnose the existing malady of the Indian cotton trade and industry and suggests a permanent line of action to be followed during the post-war period. There is another thing to be mentioned in this connection. Since there is no separate contract for the non-staple varieties, the post-war scheme will have to accord a legitimate place to these styles which will continue to be grown at least in some parts of our country. Our suggestion in this respect is that for the post-war period there should be a system of two hedge contracts for Indian cotton in Bombay, one for staple and another for non-staple descriptions; the Bengal styles being amply looked after by Karachi. In conclusion it may be observed that a reasonable amount of elasticity and broadmindedness would be required to consolidate and popularise the working of the system that might be evolved and enforced in due course.

CHAPTER IX.

UNIVERSAL STANDARDS FOR INDIAN COTTON.

1. INTRODUCTION

There is one more question to be considered in connection with the system of hedge contract in the Bombay market and that is the question of the preparation of standards. The standards should be on a certain basis and uniform all throughout the year as well as for ten to fifteen seasons. For instance 'Fine', 'Fully Good' or 'Superfine' should not change every year but must be constant. The best thing in a country like India is to have uniform standards for our cotton or what is known in America as "Universal Standards." In America no one is allowed to sell cotton except by "Universal Standards". Liverpool and Bremen had to throw off their standards and accept the "Universal Standards". In India standards are prepared by the E.I.C.A. and the K.C.A. for their respective markets. These standards are different in respect of the same varieties of cotton and the result is a keen competition between the two markets. This tends to injure the interests of the cultivator. At present the position in India is that what is passed in Bombay may be rejected in Karachi or Madras and vice versa.

In recent years the question of having universal standards for Indian Cotton has been prominently brought to the notice of the cotton trade of our country. During the last decade strenuous efforts were made, particularly by the Indian Central Cotton Committee, to evolve such a scheme of standardisation as would be universally acceptable. One of the secrets of the successful marketing of American cotton is the fact that in different markets their standards are uniform. Although universal standards for American cotton have been adopted in domestic and foreign markets, their establishment for Indian cotton even in India appears a far outcry. The consensus of opinion expressed to us in the course of our investigation was that the adoption of universal standards would mark a definite step forward in the consolidation of marketing interests of Indian cotton.

Every cotton merchant knows that the quality of cotton is not constant but liable to great changes in style and staple, especially after a number of years. Fixed standards prepared years back would not therefore represent actual growths of current crop. Both buyers and sellers are likely to suffer by being compelled to do business on standards which are more or less imaginary and practically useless. The Liverpool Cotton Association's standards may be cited as a case in point. In 1939, the Liverpool replicas of Bengal, Oomra and Broach were found, on inspection and compa-

ri son, to be thoroughly unrepresentative of their actual growths in style, colour, grade, etc., and as such failed to afford any guidance about the quality in the markets of Europe.¹ It is a matter of common knowledge that at times such a situation proves a serious handicap in the transaction of business on these standards. Again, as the standards of the two leading Indian Cotton Exchanges of Bombay and Karachi differ in respect of the same varieties, a certain amount of competition results inevitably. This should be regarded as detrimental to the interests of the cotton trade even in this country. A reference in this connection to the general opinion of the Standards Sub-Committee of the I.C.C.C. indicates that if universal standards were made the basis of trading in these markets, it would help the Indian cotton interests at home and in the foreign places. Accordingly the I.C.C.C. requested the East India Cotton Association and the Karachi Cotton Association to alter their bye laws so that trading would be conducted on universal standards only and not on the standards of the respective bodies.² In response to this, both the Associations consented theoretically to base their standards on the basis of universal standards for Indian cotton as prepared and passed by the standards Sub-Committee of the I.C.C.C. But in practice, this undertaking is put aside and the standards are prepared by each body independently of each other with the result that their classification tends to vary considerably.

The system of classification of cotton consists, in the main, of two principal divisions, viz. (1) the process of grading and (2) the process of stapling. The well-known qualities by which cotton is classified generally include the colour, foreign matter, length and strength. In business parlance, these qualities are referred to as (a) grade, (b) staple and (c) character of cotton.³ While the usual methods of trading in spot are "on actual samples," "on type" or "on description," by far the largest percentage of the cotton crop of any country is sold "on standards." It is thus in the interests of the parties concerned that there should exist a system of classification covering the principal trade varieties acceptable to all. Realising the necessity of such a scheme and appre-

¹ Ref. to the correspondence between the Liverpool Cotton Association and the East India Cotton Association during the year 1934.

² Letter from the I.C.C.C. to the E.I.C.A. and the K.C.A. dated 12.11.1936.

³ The term 'grade' covers not only (a) the colour, lustre, and brightness of the fibre, and (b) the nature and the amount of foreign matter in the lint, such as leaf, dust, twigs, and so forth but also (c) those characteristics which result from the quality of the spinning, such as presence and absence of stringy cotton, gun-cut fibres and so forth, these characteristics being termed 'preparation'. The term 'staple' refers simply to the length of the fibre; it may be considered to be an abbreviation of the phrase 'staple length'. The term character indicates the degree of uniformity of length of fibres, their strength, smoothness, and silkiness and what is known as 'body,' this latter term meaning the degree to which the fibres tend to adhere to each other.—A. H. Garside: *Cotton goes to Market* 1935, pp. 51-52.

uating the desirability of its enforcement, the U.S. Department of Agriculture has progressively developed and effectively adopted the system of standard classification during the past 25 years; first for grades and later for staple lengths. Since 1923, these standards¹ are known as 'Universal Standards of American Cotton'.

The following two tables reproduce the official Government classification of grades and staples of American cotton respectively —

TABLE I
Official Government Classification of Grades of American Upland Cotton

Blue stained	Gray (light blue tained)	Extra white	White	Spotted (very light yellow tinged)	Yellow tinged	Light yellow tained	Yellow tained
			Middling, Fair				
			Strict Good				
			Middling Good		S / M		
G. M.	C. M.	C. M.	Middling, Strict	C. M.	C. M.	G. M.	G. M.
S. M.	S. M.	S. M.	Middling, Middling	S. M.	S. M.	S. M.	S. M.
M.	M.	M.	Strict Low	M.	M.	M.	M.
		S. L. M.	Middling, Low	S. L. M.	S. L. M.		
		L. M.	Middling, Strict Good	L. M.	L. M.		
			Ordinary Good				
			Ordinary				

TABLE II
Official Government Classification of Staples of American Upland Cotton (in inches)

3/4, 13/16, 7/8, 29/32, 15/16 31/32, 1, 1 1/32, 1 1/16, 1 3/32, 1 1/8
1 5/32, 1 3/16, 1 7/32, 1 1/4, 1 9/32 1 5/32, 1 11/32, 1 3/8, 1 1/2.

It will be noticed that there is a total of 37 different grades and that there are 20 staple lengths for American cotton. In this

¹ On July 30, 1923, the Secretary of Agriculture issues an order promulgating the revised standards and stating that since the standards had been agreed upon and accepted by all the leading European Cotton Exchanges, they might be termed and referred to as 'Universal Standards for American Cotton'. That term is now used in reference to all of the grade standards for American Upland Cotton except those for extra white. — *Ibid.* p. 55.

connection, two facts⁵ which deserve a pointed attention should however be borne in mind. (1) Whereas the Government classification covers a maximum range of 9 grades in any one colour, 70 to 80% of the crop falls within 3 of these grades, namely, strict low middling, middling and strict middling. (2) While the Government classification for staple covers a total range of 20 staple lengths, 75 to 85% of the crop is failing within 6 of these staple lengths, from 7/8" to 1 1/32".

II. HISTORY OF UNIVERSAL STANDARDS

Having formed the conception of universal standards, it is necessary at this stage briefly to narrate their history for American and Indian cottons. This will duly enable us to appreciate the economic role of universal standards for our growths.

(i) **History of Universal Standards for American Cotton:** It will be recalled here that the New York Cotton Exchange was organised in 1870 and the New Orleans Cotton Exchange was brought into being in 1871. In course of a few seasons of trading, the American cotton trade felt the necessity of having a uniform method of classification. In 1874, a conference of the various representatives of the American Cotton Exchanges was therefore organised and held in Augusta. As a result of the recommendations then made, all the exchanges agreed to prepare certain standards⁶ on a common basis. Somehow, these standards were not adopted for universal use. Only the N. Y. Cotton Exchange adhered to them. For the first time in 1909, the Department of Agriculture prepared and established the permissive official standards⁷. They were prepared by an expert committee consisting of prominent business men and experienced classifiers of the U. S. A. But their adoption and use were simply voluntary. In fact, there was no statutory obligation to follow them. These official standards were therefore never formally promulgated nor was any campaign undertaken to secure their adoption by the trade. Hence, they failed to come into general commercial use replacing the different existing standards, and multiplicity of classification remained the order of the day. With a view to put an end to this chaotic condition the American and European Cotton Exchanges proposed to prepare in 1913 a new set of International standards. In 1914, the Department of Agriculture was approached to adopt the proposed classification. This brought home to the authorities the fact that a new system of classification was badly wanted.

In the meantime, the Cotton Futures Act of 1914 was passed in America. It provided *inter alia*, for the use of "official cotton

⁵ *Ibid*, p. 66.

⁶ This system was known as "standard American classification."

⁷ In 1908, the Department of Agriculture was enabled to undertake a systematic work in cotton standardization and to establish an official standard for the nine grades of white American cotton by a special clause in the Act of 1908.

standards" of the U. S. A. promulgated by the Secretary of Agriculture.⁸ The Act compelled all the American futures exchanges to use only the official standards in every transaction. The next step was to enlist the co-operation of foreign exchanges in universalising the use of these standards. Towards the end of 1914, the Department therefore sent representatives to European markets. The American delegates went first to Liverpool with copies of official standards. The Liverpool Cotton Association had its own fears and doubts. In order to safeguard its own position, the Association laid down certain conditions⁹ for the acceptance of the American standards. Though an agreement could not be reached between the parties, the discussion convinced Liverpool about the comprehensiveness of the U. S. official standards. The delegates called upon Bremen next and conferred with the representatives of the Exchange. This helped to establish a working understanding between the parties. In 1915, they met the members of the Havre Exchange, where it was stated that no criticism of the standards could be made.

In spite of a series of conferences with various exchanges, the position in 1916 was that none of the foreign exchanges had adopted the official standards and that the U. S. Government had failed to force them on the European markets. The Cotton Futures Act was therefore immediately repealed. The situation however did not improve. Under the circumstances, nothing could be done for the following five years. It was in June 1921 that the United States ultimately took a bold step forward by the introduction of the Fulmer Bill. In March 1923, the Bill received the assent of the President and became the U. S. Standards Act. This Act compelled all transactions in interstate and foreign commerce to be in accordance with the grade standards established under it. It now created problems for both the countries of Europe and U.S.A. because the export of American cotton came to about 50% of the crop, and in absence of any recognized and adopted standards, those dealing in it began to experience great hardship. They at once realised the necessity of arriving at some workable basis through mutual understanding. With a view to clear the atmosphere of misgivings, the Agricultural Commissioner made a trip,

⁸ Under the Cotton Futures Act, the Secretary of Agriculture was "authorised from time to time, to establish and promulgate standards of cotton by which its quality or value may be judged or determined, including its grade, length of staple, strength of staple, colour and such other qualities, properties and conditions as may be standardised in practical form."

⁹ The conditions were: (1) that the U. S. Government should guarantee not to undertake to certify or arbitrate shipments of cotton sold to Europe, (2) that Liverpool and the U. S. Government should submit standards to the other periodically and try to adjust disagreements or discrepancies by mutual concessions, (3) that the sole monopoly of preparing and selling standards in Europe must be granted to Liverpool and (4) that orders from the U.S. for future contract, on foreign exchanges should be exempted from the tax—Official records of the F.I.C.A. Needless to say that none of these conditions were acceptable to the U. S. Department of Agriculture.

to Europe and held a number of meetings with interested and important interests. In May 1923, a conference of the European Cotton Exchanges was held in Liverpool. Visualising the strength of the American authorities, the conference decided to send a delegation to U. S. A. Its ulterior object was to devise some working agreement under the U. S. Standards Act. It was in June 1923 that a final conference of historical importance was called at Washington where representatives from the leading Cotton Exchanges of Europe met representatives of the American cotton trade and officials of the Department of Agriculture. The Department proposed that if the European Exchanges adopted the official standards as Universal Standards, the Secretary would vest in them the final authority to determine the classification as to grade and colour of exported cotton. Further, a revision of the then existing official standards was suggested with a slight modification here and there so that they should become universally acceptable. The conference agreed to both the proposals and the boxes of standards as finally approved by all were set aside. The conference embodied these and other terms in an agreement¹⁰ signed by the Department of Agriculture and the Associations at Liverpool, Manchester, Bremen, Rotterdam, Havre, Barcelona, Ghent, Milan as well as the Federation of Master Spinners. This was followed in 1924 by a supplementary agreement providing for the presence of the signatories once every two years at Washington to approve the copies of Universal standards for American cotton.

(ii) **History of Universal Standards for Indian Cotton:** Soon after the adoption of Universal Standards for American cotton in 1923, the Indian cotton trade began to evince some interest in evolving a similar scheme for our growths. The I.C.C.C. took active interest in giving a practical turn to this plan. It was as early as 1927 that the idea of adopting the common standards for Indian cotton was given expression to by W. E. Jones, the then Vice-President of the I.C.C.C. and the representative of the E.I.C.A.¹¹ In 1928, a deputation from Bombay went to Karachi to confer on the advisability of mutually adopting practical measures to gradually level up the differences existing between the Bombay and Karachi standards. As a result, Bombay and Karachi agreed to accept some of the standards as a common set between them during the following season. On account of different views held

¹⁰ The main points in the agreement are: (1) that during the time the agreement remains in force the Department of Agriculture shall not revise or change the standards before such modifications have been considered at a meeting at which the Associations will be given an opportunity to attend, (2) that at such meetings the Associations have 50 votes apiece and the Department has 50 votes out of a total of 100 votes, and (3) that the Department shall authorize from time to time the members of the Committees of the respective Associations to exercise the powers of a board of examiners in matters of classification of cotton in dispute, and their award to be final.—Letter from the I.C.C.A. to the I.C.C.C. dated 21-1-30

¹¹ Proceedings of the 16th meeting of the I.C.C.C., 1927, and refer to the Resolution passed during this meeting.

by the trade representatives in the two markets, it was, however, not feasible to secure uniformity regarding others.

In 1929-30, the I.C.C.C. sounded a note to the effect that "there was no reason why universal standards for Indian cotton should not be adopted at least in India, at an early date." With a view to make a beginning in the matter in 1932 the I.C.C.C. invited the views of the commercial, agricultural and governmental bodies interested in cotton throughout the country.¹² On the basis of replies received, the I.C.C.C. passed the following resolution at their 26th meeting held in February 1933:—"That steps be taken to introduce universal standards for Indian cottons for use in India itself and the Local sub-committee be instructed to prepare a scheme for the purpose in conjunction with the various trade associations." The Local sub-committee nominated a small committee called the Standards Sub-Committee consisting of five members—one of the Imperial Council of Agricultural Research, two of the E.I.C.A. and two of the K.C.A.—representing the trade and agricultural interests concerned to prepare standards acceptable to both Bombay and Karachi. They met for a number of times in 1934 and decided that standards should be prepared according to the groups of cotton dealt in the respective centres. Along with this, particular growth, number of description of standards were also decided. Later on, in July 1934, the constitution of the Standards Sub-Committee was modified so as to include representatives of the cotton growers of the tracts concerned.¹³ Next, the I.C.C.C. requested and even pressed the E.I.C.A. and the K.C.A. to adopt universal standards as basis for preparing their official classifications. The K.C.A. agreed to have its standards prepared on the basis of universal standards from the season 1936 onwards. The Standards Committee of the E.I.C.A. also unanimously recommended in 1936 the adoption of Universal standards by the Association.¹⁴ But as is well known to all, the E.I.C.A. suffers from certain mandatory provisions right from its inception. Hence, it could do nothing but express its inability to comply with either the request of the I.C.C.C. or the recommendation of its own committee. Attempts were however continued to induce the E.I.C.A. to fall in line. In 1938-39, the Standards Committee of the E.I.C.A. having noted the disparity between the three classifications of Bombay, Karachi and universal standards, recommended that a joint meeting of the representatives of the E.I.C.A., the K.C.A. and the Imperial Council of Agricultural Research should be convened in Bombay. Its object was to prepare and pass the uniform boxes for Indian cotton which might be accepted by the respective bodies for their use in future. This Committee

¹² Out of about 70 bodies approached, replies from only 24 were received. This fact may be regarded as a running commentary on the attitude and apathy of the cotton world in India.

¹³ Ref. to the Secretary's note submitted to the 29th meeting of the I.C.C.C., 1934.

¹⁴ Report of the Standards Committee of the E.I.C.A. submitted in June 1936.

emphatically brought home to the E.I.C.A. that the desired result could be achieved only by taking action in this manner. But the E.I.C.A. remained adamant and even a bold recommendation of its own Standards Committee was not acted upon. Since then, this matter has been hanging.

From the foregoing historical review, it will be noted that the adoption of universal standards for American cotton took more than 15 years in spite of the fact that it had the powerful backing of the national and resourceful State. It should also be noticed that but for the effective and timely legislation of the U. S. A. as well as the indomitable will of the Department of Agriculture, the problem of universal standards for American cotton would have remained unsolved. In contrast to this, the history of the adoption of universal standards for Indian cotton appears to be rather a fiction. It simply depicts misdirected efforts, meaningless recommendations and pious requests of powerless institutions. Noble aspirations and hopes of those who sincerely nourished and adumbrated the idea of universal standards for Indian cotton is held to-day in abeyance after a devotion of more than a decade and half to this problem.

3. ROLE OF UNIVERSAL STANDARDS

Having noted the meaning of universal standards and peeped into the history of their adoption, we are now in a position to examine in this section their economic role and analyse their scope for Indian cotton.

Functions of Universal Standards: Broadly speaking, the universal standards can be said to perform three main functions for the cotton crop of a particular country. These are: (1) to simplify and standardise classification and its process; (2) to establish uniformity in grades, number and descriptions; and (3) to maintain evenness from season to season so that continuity and utility of standards remain universally acceptable. Individually as well as collectively these functions tend to bring about standardisation of a system of classification which can be verified by any one at any time. Unity in grades and staples can be kept intact by seasonal comparison and contrast with the previous set while preparing the new one from every fresh crop. Simplification of the process in preparing standards and avoidance of the multiplicity are not the only services rendered by universal standards but minimisation of the basic trade descriptions and their numbers inclusive in the structure of classification is another most significant point in their favour. It may be mentioned that after all it is the range of standards that matters most in any system of classification. The usual theory is that the structural range of standards should neither be too broad nor too narrow. Hence, the functions performed by universal standards may be considered of paramount significance to any cotton crop.

Their significance for Indian Cotton: The importance of universal standards in general and for Indian cotton in particular can never be exaggerated. No attempt can over-estimate the necessity and utility of universal standards for our growths. Different standards were, and are, being used in different Indian markets and the tendency was and is, even today, to lower or raise or adjust the classification so as to attract more cotton to a particular centre. Until there are common and uniform standards this competition will continue at the cost of the Indian cultivator. It is therefore essential that the system of classification in all markets should not vary, but be the same. It goes without saying that uniformity of standards is in the interest of the Indian cotton trade as a whole. At the present moment, one finds that different standards are being prepared in different markets for the same descriptions, e.g., F.G.M.G. Bengal or Fine M.G. Oomra or for any other variety. It is in fact an anomaly that standards for cotton grown in a common area should at all vary in places like Bombay, Karachi or Madras. But this is not all. Differences among grades differ from market to market and in some markets the classification is changed from year to year.¹⁵ This fact should go a long way to serve as an eyeopener. It is hardly necessary to convince one that universal standards for Indian cotton would be highly beneficial to the interests of the Indian grower. It becomes evident therefore that an agricultural country like India, whose prosperity is intimately connected with the prosperity of her cotton, trade and industry, should devise some ways and means whereby the Indian farmer could be freed from the prevailing chaotic condition in her premier commodity.

The effect of the adoption of universal standards on the existing practices is bound to be far reaching.¹⁶ It will be forcefully and at the same time most favourably reflected on the cotton cultivation, trade and industry of India. For instance the textile industry can buy its requirements in the market with complete confidence and can adopt a long-term programme for the manufacture of certain specialised types of fabrics. Once trading in Indian cotton on the basis of universal standards is on a definite footing, the trade can supply and guarantee the exact qualities required by the domestic and foreign customers. The adoption of universal standards will help to broaden the market in the interests of trade and all concerned and would eliminate chances of an unnatural squeeze in either Bombay or Karachi. It will tend to promote co-operation

¹⁵ Personal talks

¹⁶ Cf. "The setting up of universal standard for Indian cotton would result in improved reputation for them." - "Welcome the proposal for the evolution of uniform and universal standards for Indian cotton which would be beneficial to the cotton trade interests as a whole as well as to the cotton grower." - "Universal standards for Indian cotton all over the world were to be welcomed as they would facilitate trade" - Replies to a questionnaire issued by us

between these markets.¹⁷ The cultivators may on the adoption of universal standards find it difficult in the beginning to adjust themselves to the new requirements but ultimately as the significance and advantages of the measures come to be realised, they will try to maintain the purity and quality of the crop. Where the grower is assured of definite prices on the strict basis of the standards adopted, he is sure to cultivate cotton of superior quality and realise the futility of mixing. There will thus be a toning up of the quality of cotton coming to the market and the way will be paved for the easy establishment of one variety tracts. The following reasons may be advanced for the benefit of those who have any doubts regarding the special significance of the adoption of universal standards for Indian cotton:—(1) Universal standards would mark a definite step forward in the consolidation of marketing interest of cotton in India; (2) Their establishment is essential not only in India but also throughout the world, as it would result in the buyer, wherever he might be, knowing that Indian cotton could be obtained in definite standards which were not fixed according to the vagaries of buyers and sellers at particular centres but which truly represented the various growths; (3) The use of different standards can be avoided by their adoption; (4) They would protect the interests of both small and big exporters irrespective of foreigners buying them or not; (5) Their adoption would result in the extended use of Indian cotton abroad, which would undoubtedly be to the benefit of the Indian cotton grower; (6) Greater efforts will be made by all those concerned in the production of cotton for the maintenance of the purity and quality of the crop; and (7) Preferential treatment of cotton coming from or grown in particular localities will cease and all cultivators irrespective of the differences in place will be assured of the premium fixed for the standard grade and staple.

Difficulties in their Adoption: Granting for a while that the importance of universal standards for Indian cotton is duly realised and adequately appreciated by the interests concerned and that the country is willing to adopt them without delay, feasibility of their acceptance as well as introduction needs to be examined from the practical standpoint. There is no doubt that this problem bristles with one hundred and one difficulties of varying nature. To begin with, it may be stated that the long time taken for the spread of the improved varieties, the cultivation of superior types side by side with inferior growths and the consequent natural mixing of cotton in the fields, the wide variations in the same varieties from season to season and between the first and the last pickings, deliberate attempts at adulteration and watering, fraudulent

¹⁷ Cf. "The adoption of universal standards will promote cooperation between Bombay and Karachi Associations and markets. The option of tenders at either Bombay or Karachi would then present no difficulty on the part of—(a) sellers who tender where the cotton lies and (b) most of the shippers."—Reply to our questionnaire.

methods of ginning and pressing, unreliable systems of distribution of seeds, absence of proper reservation of tracts devoted exclusively to one variety and such other causes contribute to the difficulties in the adoption of universal standards for our growths.

Again, the human element prevailing in the Indian cotton trade and business is considered as a stumbling factor playing havoc in the adoption of any scheme of standardisation.¹⁸ Generally what happens is that the description of the standard on paper changes a great deal in practice. Two series of standards were prepared in the beginning, one at Bombay and the other at Karachi, and although it was intended to secure uniformity, the situation tends to indicate great diversity through multiplicity of standards followed by the respective markets. The annual reports of the I.C.C.C. reveal that they have tried their utmost to reconcile the divergence in the same standards prepared by Karachi and Bombay but to no avail. These bodies do not want to understand each other's point of view. While both the bodies admit the necessity of common standards, the historical initiative and early start, personal bias for one's system of classification and human prejudice against each other set of standards have prevented these markets from giving a practical turn to their theoretical belief. Moreover, in view of the existing mandatory provisions of the Bye-law No 128 of the E.I.C.A., Bombay cannot adopt universal standards prepared and passed by the Standards Sub-Committee of the I.C.C.C. Trading allowed on the standards of individual associations in spite of the repeated appeals from the I.C.C.C. to adopt only universal standards as basis and different basis adopted by the K.C.A. and the E.I.C.A. constitute a further serious hitch in achieving uniformity. Besides, the procedure prescribed by the two bodies for the final adoption of standards varies, e.g., the Karachi standards are finally passed by the Board of Directors and hence carry no right of appeal from the trade whereas in Bombay, standards are passed by the Standards Committee subject to a right of appeal from the trade to the Appeal Committee whose decision is final. Similarly, different tunes for preparing standards and different basis for contracts traded in both the markets come in the way

Another difficulty appears to have been the dominance of the foreign markets of Europe and Japan, which seem to be in the habit of preparing and following their own standards for our cotton. At times they refuse to recognise the classification adopted by the Indian markets. For the most part, standards adopted by the foreign markets like Liverpool remain unchanged as they are made every 5 to 7 years.¹⁹ Character and composition of the Indian

¹⁸ Interview and discussions with the leading cotton merchants.

¹⁹ Cf. "The Liverpool standards were much inferior to and not at all representative of the actual growths of Burma and Brazil"—Annual Report of the I.C.C.C., 1940, p. 99

crop may alter but the foreign interests both at home and abroad prefer to stick to their old methods of classifications. In fact, Indians have been shipping not only against standards adopted by foreigners but on the condition that when cotton reached the other side it will be arbitrated by a board of men who represent the buyer. In this way it is abundantly clear that unless the foreign markets are compelled to adopt and use our standards, uniformity will not be maintained. The Indian standards need to be recognised by the foreign exchanges as otherwise the system may entail great hardship on both the sides.

Further, conditions of cotton production and business in India and America differ vastly. The introduction of universal standards in America meant no revolution in their usual methods of business. The shipping business has been monopolised by the American companies and their Government have a control over the arbitration boards in connection with American shipments for the protection of their interests. In America business on class has always been more prominent than business on type owing to the greater uniformity of their growths. On the other hand, Indian cotton differs more widely from one season to another and from the commencement of the season to the after-monsoon period. In view of all these difficulties, the application of a system of universal standards in India is regarded by some²⁰ as revolutionising the present methods, and that the representation of the infinite variety of Indian cotton by means of a system of classification, however variegated and complicated, is considered extremely difficult of execution.

Present Position of Indian Cotton: Before we pass on to a proposal for the solution of some of the above-mentioned real and imaginary difficulties coming in the way of adoption of Universal standards for Indian cotton, it would be interesting to make here a note of the actual position of our growths as it prevails today. As a result of the movement set afoot since 1927 for the introduction of common standards between Bombay and Karachi and for the establishment of universal standards in the country, the situation today arrived at is that the Standards Sub-Committee of the I.C.C.C. decided that standards should be prepared for the following cottons, the first four of which should be dealt with at Karachi and the remainder at Bombay:—(a) Bengals (b) Sind (c) Punjab-American (d) Sind-American (e) Oomras (f) Muthias (g) Dholleras (h) Broach and (i) Kumptas. The growths of the cottons to be used in preparing the standards are also settled; viz., Punjab Deshi for Bengals, Sind Deshi for Sind, 4F for Punjab-American, Sind-American for Sind-American, Beraus for Oomras, Muthias for Muthias, Dholleras for Dholleras, Broach for Broach,

20 Cf. "Until the experimental work for the improvement of the various strains has crystallized into something definite, it would be futile and in fact dangerous to adopt universal standards."—Reply to our questionnaire.

and Kumptas for Kumptas. Each variety should not have more than the following three uniform standards:—

(a) Bengals	Fully Good, Fine and Superfine.
(b) Sind	Fine, Superfine and Extra Superfine.
(c) Punjab-American	Fully Good to Fine, Fine and Superfine.
(d) Sind American	Fully Good to Fine, Fine and Superfine.
(e) Comras	Fully Good, Fine and Superfine.
(f) Muthias	" " " "
(g) Dhollerias	" " " "
(h) Broach	" " " "
(i) Kumptas	Good, Fully Good and Fine.

Add to this the following uniform standards for the under-mentioned cottons:—

(j) 4½" Saw ginned, Punjab	Fully Good to Fine, Fine and Superfine
(k) 289½" Roller ginned, Punjab	" " " "
(l) 289½" Saw ginned, Sind	" " " "
(m) 289½" Saw ginned, Sind	" " " "
(n) 289½" Saw-ginned, Punjab	" " " "

A set of standards prepared and passed every year by the Standards Sub-Committee is preserved at Bangalore in hermetically sealed boxes for reference in case of dispute. Attention may be drawn to the fact that though universal standards have been passed for the above-mentioned varieties, they are purely permissive classifications, subject to a voluntary adoption by the markets concerned. Hence, they are not bound to be effective either in India or abroad. In consequence, if the cotton interest in India suffers seriously from anything, it is the multifarious system of grades and staples. In fact, the present position is that there are as many schemes of classifications in existence as there are markets for Indian cotton, both at home and abroad. Apart from this, it will be observed that the progress made so far is far from satisfactory in as much as the Standards Sub-Committee of the I.C.C.C. has not yet been able to evolve a complete set of universal standards for Indian cotton which would be acceptable to the trade as a whole. Even these so-called universal standards are not prepared and passed for the remaining principal growths which go to number more than two dozen at least.

4. SOLUTION: AN INDIAN COTTON STANDARDS ACT

The present position of Indian cotton is comparable to that of the American cotton during the second decade of this century. It has passed through more or less similar difficulties and problems. Indian cotton has now reached a stage when its maladies can be remedied only by undertaking the most comprehensive piece of legislation on an all-India basis.

Proposal for a Comprehensive Piece of Legislation: Since nothing short of this can improve the situation, we propose that a

law called the Indian Cotton Standards Act be passed at an early date. Enactment of an effective legal measure covering all the principal trade varieties is badly needed at this moment.²¹ We do not see any reason why, if the U.S.A. can solve the troubles of American cotton by means of an effective legislation, our country should not follow suit and pack up the ill of Indian cotton. It may be admitted that the determination of universally acceptable standards is a task of great difficulty. The U.S. Department of Agriculture had to carry on extensive investigation, and surveys for several years before arriving at the decision to adopt universal standards. This collection clearly demonstrated the possibility of preparing a single set of uniform classification representative of the entire American growth. It was with the aid of this material and the assistance of the expert classifiers that the actual details were worked out. Unless something is done on these lines for Indian Cotton, the matter is not likely to improve from its existing deplorable state. The proposed Indian Cotton Standards Act should prescribe some such procedure for the preparation, passing and adoption of uniform standards for our growths. In addition, the Act must compel every merchant, shipper, buyer and trader in every transaction, quotation, publication of prices and in classification to use only the official cotton standards as is done in the case of American varieties under the U.S. Cotton Standards Act of 1923. The effects of the adoption of universal standards for Indian cotton by means of legal enactment are bound to be far-reaching. As in the U.S.A., the several documents connected with trade will be required to be stated in terms of the standard to be valid in a court of law in case of a dispute.²² In order to establish and maintain confidence in the integrity, comparability and uniformity of copies of the original set of universal standards, elaborate arrangements and great precautions are considered to be absolutely essential. With a view that the physical appearance of the original key samples might not change in storage, care should be taken to preserve their character from the ravages of time. Moreover, from the time of purchase of cotton intended for the preparation of the standards up to the disposal of the prepared sets every operation and environmental condition likely to affect such operations should be carefully regulated and controlled to produce uniformity and evenness.

Standardisation of Indian Grades: With this end in view, we suggest that the following five grades may be adopted for the

²¹ Cf. "It would be advisable to urge the Government of India to make the necessary legislation for the purpose."—"That Government should be asked to pass legislation to enforce these standards in India and abroad"—That legislation is necessary to enforce the use of universal standards".—Reply to our questionnaire.

²² Ref. to the U. S. Cotton Standards Act, 1923. Since the law became effective, bills of lading, warehouse certificates, shipping document insurance contracts, newspaper and private quotations, invoices and all other relevant instruments are required to be stated in accordance with the official U.S. cotton standards. Otherwise these documents hold no legal status and are not enforceable in a court of law.

principal trade varieties of Indian cotton as a set of official standards and be introduced as universal grade standards for our growth:—(1) Good, (2) Fully Good, (3) Fine, (4) Superfine, and (5) Extra Superfine. Out of these, the most frequently employed grades will be only three, viz., Fully Good, Fine and Superfine. All the improved and stapled varieties of Indian cotton can easily be included in the structural range of these grade standards, e.g., Americans, Gujarat, Southern, C.P., Jarilla, etc.

Standardisation of Indian Staples: Similarly, we suggest that the staple lengths of Indian cotton should be based on a uniform set of standards for staple. The following three staple length groups be adopted and introduced as official standards for Indian cotton:—

GROUP I:	(i)	Staple length over	1"
	(ii)	" "	1"
	(iii)	" "	15 16"
GROUP II:	(iv)	" "	7 8"
	(v)	" "	13 16"
	(vi)	" "	3 4"
GROUP III:	(vii)	" "	11 16"
	(viii)	" "	5 8"
	(ix)	" "	9 16"

Out of these groups, the frequency will be concentrated mainly on the second

5. CONCLUSION

The conclusion that can be drawn from the above discussion is that in spite of some practical difficulties there is no room for doubting the possibility of adopting universal standards for the principal varieties of Indian cotton. It should however be observed that before universal standards for Indian cotton can be adopted it is necessary to see that those in use in India are uniform in every respect. The ultimate goal of having such standards for our growths is to obtain recognition thereof as such in international markets. The first step in this direction is therefore to make the adoption of common and uniform system of classification in the two leading cotton markets in India, namely, Bombay and Karachi, an accomplished fact. At present, as we have seen above, universal standards are prepared in two groups, the Bombay group and the Karachi group, and the practice is to prepare universal standards after the official standards of the respective associations for corresponding growths are passed and put into effect. No difficulty arises in respect of preparation, passing and even adoption of universal standards under the Bombay group since they are mere copies of the E.I.C.A. standards. Similarly, if the Karachi group can be made to follow suit the matter will be easy.²³ As

²³ Universal standards that are prepared in Karachi are a sort of compromise between Bombay and Karachi standards of what they were when the Standards Sub-Committee of the I.C.C.C. was first appointed.

standards they should not change year in and year out irrespective of the crop. If changes are made so often by either body then they can not be said to have adopted uniform standards.

It should however be pointed out in this connection that most of the so-called universal standards are not in the least typical of the growth they are supposed to represent. It seems that the implications conveyed by the word "universal" have not been fully appreciated. If the foreign markets were to be asked to adopt the present universal standards as the basis of their contracts, it is rather doubtful whether they would agree to do so, simply because these standards are not representative of the varieties that move today in the markets. Again, it is obvious that in absence of any agreement even in India, it is difficult to press for maintenance of proper standards for Indian cotton in Liverpool and other markets. Once uniformity is achieved between Bombay and Karachi, both the Associations should invite Liverpool, Bremen and Osaka to accept Indian universal standards for their bases through the medium of a legislative measure. But as the history of universal standards for Indian cotton reveals these two Associations would not agree to the common preparation of standards by one representative body. We therefore conclude that unless standards are prepared and passed by one central agency at one place, nothing could be achieved in this direction. In order to achieve uniformity, our suggestion is that all universal standards for the common use of Bombay and Karachi be prepared by one central agency at one place and passed by the Universal Standards Sub-Committee, appointed under the proposed Indian Cotton Standards Act, consisting of 9 members in the following order: 2 representatives of the E.I.C.A., 2 representatives of the K.C.A., 2 representatives of growers of cotton of the respective tracts, 1 official representative of the Provincial Government concerned, 1 official representative of the Central Government and 1 Vice-Chairman of the Imperial Council of Agricultural Research who should be ex-officio Chairman of this body. The standards so prepared and passed be considered final and no right of appeal should lie thereon from the cotton trade. This body should be an indivisible one and should have the sole agency for the preparation of universal standards for any variety of Indian cotton irrespective of the fact whether a particular style is being traded either in Karachi or Bombay. No doubt, the due importance should be assigned to Bombay which unlike Karachi is interested in all cottons and which had been preparing its standards long before Karachi had any idea of it.

CHAPTER X

SPECULATION

SPECULATION in its broader sense of taking risks in the process of buying and selling for profit has been in existence for centuries and is said to be as old as the history of mankind. It is carried on both in 'spots' and 'futures'. Speculative system should therefore be divided into two types: (1) Unorganised speculation or speculation in spot and (2) organised speculation or speculation in futures. Our immediate concern is with speculation in futures as opposed to that in spot cotton. Hence, we need to consider the definition and character of organised speculation. This will enable us to examine the role of speculation in the distributive system and to scrutinize its effects upon the price level of an agricultural commodity like cotton.

I GENERAL.

Difference between speculation in spot and futures: The most conspicuous point of difference between the organised and unorganised speculation lies in the fact that in a futures market the commodity and the methods of buying and selling it are so standardised that it is possible for an individual to buy and sell without taking the trouble to learn the technique of judging the qualities, and other details which are necessary for operating in a spot market. Other important points of difference between the two systems are: (a) short-selling is very much restricted in the case of speculation in spot, (b) turnover under spot is relatively slow, and (c) speculation in spot requires proportionately more capital than that required in organised speculation. Since payment as well as delivery are postponed, heavy trading on a relatively small amount of capital is possible under speculation in futures. Thus, it is easy to see why a futures market attracts a great number of dealers who may be connected with the trade in no other way.

Definition of Speculation: The word speculation is defined as the purchase or sale with the expectation of profiting "by anticipated but conjectural fluctuations in price."¹ Its primary condition is that the fluctuations in price which form the basis of speculative transactions must be 'conjectural'. Speculation thus denotes a business venture involving unusual risks for the chance of securing large profits as distinct from ordinary earnings. The two principal elements involved in speculation are: (1) chances of making an extraordinary profit and (2) equal chances of incurring huge losses. Since both these elements are intermingled, the former

cannot be availed of without accepting the latter. Those who neither desire nor mean to speculate will let go both of them by entering into offsetting transactions, and depend only upon the merchandising returns arising out of the ordinary course of business. Accordingly, all those who run the risk of adverse price movements with a view to making a profit from a favourable change in price variations should be regarded as speculators. For instance, a grower who expects a rise in price and does not sell his cotton runs the risk of getting lower prices, that is to say, he is speculating in cotton. Similarly, a manufacturer who buys at a fixed price his requirements some months in advance without entering into orders either for manufactured goods or futures, runs the risk of an adverse change in prices and is speculating in cotton with a view to secure profits should the prices advance. In the same way, a merchant who buys cotton upcountry and does not make the offsetting transaction in futures runs the risk of price variations which may be for or against him, is also speculating. A speculator in cotton may thus be defined as a person who ostensibly buys and sells cotton or cotton futures for the main purpose of profiteering from uncertain fluctuations in prices.

Forms of Speculation: So far as the relation of speculation with marketing is concerned, the trading operations of speculators resolve themselves into two principal groups: (1) constructive and (2) destructive. Operations based on intelligent appraisement of market conditions affecting cotton may be included in the first group, while those which are based largely on a foundation of mob-psychology should fall under the second group. Destructive speculation is hardly based on rational appraisement of present and prospective conditions affecting supply of and demand for cotton. Such transactions may have originated either from a group of inexperienced speculators or professional traders. They tend at times to overbalance the activities of the more skilful and expert speculators. The presence of such operators in a market and their dealings should distinctly be considered as destructive.

Speculation and Gambling: In any form of speculation the only way in which an operator can reasonably expect to make a profit is by way of securing a difference between the prices of buying a commodity and selling it. This skill may arise from special training, unusual ability to judge the trend of the market, or from an access to special sources of information not available to all those who are prospective dealers. As a result, the speculative undertakings take a variety of forms varying between the two extremes. On the one hand, speculation may shape itself into a form of most legitimate and highly desirable trade activity and on the other, it may degenerate into gambling. There is indeed a close kinship between them. Speculation occupies the border territory between conservative investments and gambling.

Some people maintain that speculation and gambling are one

and the same form of activity. Their contention is that there is no apparent difference between the two. Of course, it is very difficult to draw a line of demarcation between legitimate speculation and gambling, because, it is difficult to state where speculation ends and gambling begins. Gambling is a vague term which is used by different people in a different sense so that it is difficult to define it. However, it may be noted that so far as the speculator is governed by rational calculations based on factual data the transaction is essentially commercial. When he buys or sells simply in the blind hope that the market will turn his way it is gambling. A contract in futures is an obligation, enforceable at law, to deliver or accept and pay for a stated quantity of cotton. A person may actually deliver the cotton or receive it, or he may step out of the transaction and never handle a bale of cotton. Nevertheless, he is for the time a part of the distributive system. A speculator acquires commercial rights and duties; a gambler acquires neither.

The fact that like gambling speculation depends on uncertainties tends to cause the two words to be used indiscriminately. But there is one point which should be borne in mind in this connection. In every gambling transaction there are two or more parties and some one must win what others must lose. This is not the case with speculation. For instance, suppose the price of the futures contract stands at Rs. 425 and A buys 100 bales. When the price goes up to Rs. 430, he sells the 100 bales to B who in turn may sell it to C at Rs. 432. C may get the chance of selling the same at Rs. 435 to D who may still be able to make a profit due to a continuous rise in prices by selling, say, at Rs. 440 - to someone. Assuming that A had bought from a person who purchased at Rs. 430 - and was obliged to sell at Rs. 425 - thus making a loss of Rs. 5 - per candy in this transaction, it is certain that only one person has lost in the course of this chain of speculative transactions. But it may happen that even the original seller might have bought at a lower level than Rs. 425 - and in that case, there would be a series of operations with all profits and no losses to any one. The case of gambling is therefore not at all analogous to that of a sale of cotton by a speculator at an increased price. In the instance cited above, there has been an actual increase in price to which probably the speculator has contributed by the responsibilities he shouldered during the time he was a party to the contract.

Referring to the economic difference, a speculator assumes the risk that already exists in the very nature of marketing a commodity, while a gambler joins with others in creating a situation out of which a risk develops. Each transaction of buying and selling cotton necessarily involves some risk while betting merely on incidental results of a particular contest is the assumption of a risk that did not exist before a bet was made. Thus a gambler creates his own risk but a speculator merely assumes the existing risk. Again, the detail-

ed nature of the work done by a speculator far removes it from the realms of the mere staking of money on an artificially created risk of some chance event. He makes an intellectual examination of data collected and searches out the trade information likely to tell upon a given market. He bases his individual opinion on reasoning which takes the form of a prolonged and systematic analysis. In short, speculators form a class of experts whose chief business is to strive, discover and foresee every event that has some bearing on prices. Speculation presupposes intellectual efforts while gambling blind chance.

2. THE ECONOMIC ROLE OF A SPECULATOR

In so far as the process of marketing an agricultural produce is concerned the fact universally acknowledged is the element of risk always present in it. This point is better appreciated when it is realised that a small change of annas two per candy in the case of Indian cotton means Rs 6 4 per 100 bales and a change of one point per lb. in the price of American cotton in the U.S. equals 5.00 dollars or in case of Liverpool $\frac{1}{2}$. On a stock of five million Indian bales or ten million American bales, this amounts to a rise or fall of Rs 3,12,500 or 5,00,000 dollars respectively. Fluctuations of Rs 10 to 20 per 100 bales, and 50 to 100 cent points in the American market and 20 to 40 penny points in the Liverpool market over a period of few weeks are common. It amounts to a tremendous rise or fall in the price and affects the aggregate value of cotton realised by the producing countries like India, the U.S.A., etc. Formerly, a merchant had to assume himself the risk of changes in prices. But the market being local the risk was comparatively small. With the development of world markets he was called upon to bear an increasing risk. As the speculative element in marketing became more important the burden increased in its magnitude. Those who pursued the marketing business were hardly prepared to face it. A distinct class of traders known today as speculators was therefore needed to relieve the producing, merchandising and consuming interests of the speculative element of this business.

Functions of Speculation: The main function of the speculative class is to be always ready to take over or deliver the commodity at an established market price. To bear the burden of inevitable risks involved in marketing is the chief justification for the existence of speculators. The speculator's profit depends upon the accuracy with which he can forecast market conditions. With this end in view, he organises and elaborates a system to get advance information. Intelligent speculation generally tends to afford the non-speculative merchant, producer and consumer a basic price upon which to make their future arrangements in actual commodity. The economic functions of speculation are: (i) to localise the merchandising risk among the speculative class whose special

function is to bear it, (ii) to relieve producers and consumers from carrying the whole year's stock by enabling the former to convert his crop promptly into cash and the latter to supply himself with raw material as his periodical needs may require without the prices being unduly enhanced, and (iii) to reduce the cost of distribution of a commodity to a minimum.

Acting as a Buffer: It is a professional dealer who really acts as a shock-absorber in the trade. He is said to be playing a vitally important role by bearing the risk that others cannot afford or dare to assume. When buyers are scarce during the marketing period his action assists materially in carrying the weight of the crop, for, he shoulders the greater part of risk resulting from price movements. On the other hand, when buyers are numerous and sellers scarce, he performs the very function of a seller and satisfies the present demand. The importance of this class can hardly be overestimated. The speculative class is said to be the best fitted to bear the risk inherent in marketing the commodities. He bears the burden of risk without any corresponding hedge against it. He may therefore be described as a buffer between the two extremes in a distributive chain of producing and consuming interests.

Providing a Ready Market: The next important service rendered by a speculator lies in the fact that it is he who is always ready to assume the role of the requisite other party in a hedging transaction. It is he who provides a ready market at any moment to any operator in futures. In fact, a speculator helps the market to function smoothly. Speculative operations are in large measure necessary, if the cotton market is to maintain continuous and stable conditions. They make the market broad and mobile. The ease with which a deal can be put through is the most important and singular service performed by him to the trade in general. He provides what is known as 'liquidity'.² Without a speculator the element of liquidity will be lacking and the market will not be able to fulfil its real function. If there were no speculators, one would not be able to buy or sell big quantities of cotton for future delivery. A speculator acts as a buyer and seller at a comparatively small cost. If this body of shock-absorbers is withdrawn, the market would be rendered not only dull but narrow. It would lack in continuity. Had it not been for this continuous character, the most important function of a futures market, namely, hedging, would be hindered to a considerable extent, since, there would be a difficulty in finding the requisite other party for hedging purposes. The force of hedge buying or selling is absorbed by speculation without causing any undue shock to the market. The presence of speculators including jobbers, floor traders, scalpers and others renders it easier for bankers and financiers to finance the movements of produce at every stage from a producer to a

² The term 'liquidity' means that the commodity may be sold instantaneously and in any amount and turned into cash at any moment.

consumer. Thus by standing ready always to buy or sell the class of speculators provide a ready market with all the advantages resulting therefrom to both producers and consumers.

Discounting the Future: Another important service of the speculative class is that it generally tries to forecast the trend of probable prices. In other words, speculators discount the future long before it would otherwise be realised by the general public. Their fortune lies in foreseeing the point at which price-making factors are going to find their focus. The speculators are concerned with facts and their interpretation with respect to the future course of prices. All known influences brought by the informative service to the attention of many are given careful consideration by them in anticipating the future trend. This serves to discount the future. It is said that a speculator by reason of his temperament, special training and experience is competent to judge price trends. He translates his opinion and beliefs into the form of operations in which the probable effects of his judgment of the future trend of prices are reflected. Further, by means of their ability to forecast prices for cotton to be delivered at different times in future, they direct the investment of capital into the most profitable channels. As a class, the speculators by means of specially collected trade information and statistical data are in a better position to discount the future some time before favourable or unfavourable news are published. The commodity often sells off when good news come out and not infrequently holds firm when unfavourable news are made public. This is attributed to the fact that the development has been discounted in advance. The effects of favourable or adverse developments is thus spread out over a period of time. The distant positions of a futures contract serve as a guide to opinion as to what price will be after some time and the contracts in a spot market are made upon the basis of these expectations. The mere presence in the market of a group of traders who have formed opinions as to the future of prices and will buy or sell in accordance with their beliefs is a constant assurance of orderly adjustment of prices. In this way, by its watchfulness and use of both official and other information including statistics, the speculative class discounts the future, prevents panic, and spreads over a longer time the consequences of unexpected news, either favourable or adverse.

Regulating Consumption: As a corollary to the preceding service, speculation regulates the rate at which the year's crop is consumed. Each season's crop be it large or small should be adjusted to the year to which it applies. Speculation by its forecasting service tends to accomplish this. By forecasting the prices of cotton to be delivered in future, the speculator exerts an effective influence in regulating the consumption of the crop. This in turn is rendered possible by the collection of statistics and trade information both officially and privately for the current as well as past so many years. For instance, if the figures relating to the

visible supply of Indian cotton plus the carry over and other relevant statistics make a total supply of our crop unusually low, it is likely under normal conditions that the prices will show an upward tendency. This higher level of prices will decrease the rate of consumption. Similarly, if a grand total figure of supply is unusually large, it may be expected, other things being equal, that prices will decline and the result will be an increase in the rate of consumption. Since price is the prime regulator of production and consumption, the discounting service of the speculative class is mainly held responsible for regulating the output and utilisation of the crop. The movement of prices brought about by the forecasting service indirectly benefits the trade by way of regulating consumption of the available supply so that each year's crop whether large or small just happens to meet the needs of the consumer.

Creating time and place utilities: Other important services rendered by the speculative class are those of creating time and place utilities. Because the speculator supplies contracts for the delivery of cotton in future, he is the creator of what is theoretically referred to in economics as 'time utility.' Similarly, because he moves cotton from one place to another by buying where it is cheap and selling where dear, he is regarded in the same sense as the creator of 'place utility'. Moreover, he is said to hasten what would otherwise be a tedious process by smoothening difficulties in the way of necessary movements of cotton from the field to the factory. He ensures that cotton shall find its own way from a place where it is not needed to a place where it is badly required. Thus by straddling he keeps prices in level between different markets.

Consideration of a speculator's remuneration: For rendering all these services what return does the speculative class expect? What is the aim of a speculator is a question with which one gets puzzled so often.³ It is not infrequently answered that the aim of the speculator is to make money and the services rendered by him are the by-products.⁴ A speculator as an individual is out to make money and not to serve anybody. The speculator who correctly foresees the trend of events profits by his judgment and promotes the necessary re-adjustment of prices at the same time. All speculators buy when they think that cotton is going to advance and sell when they see the coming decline. Their purpose ostensibly is to pocket the differential gains. Each trader operates in the hope as well as confidence of being a winner and some are gainers for a period of time while others are losers. It is pertinent to inquire whether speculators make or lose money on the whole. The common opinion in this connection points out that in the aggregate they neither put money into the cotton trade nor take out of it.

³ Replies to Questionnaire

It may then be asked what is the source of income to speculators? One source as suggested by some economists consists of the small losses incurred by hedgers.⁴ The hedger's loss is something like premium money paid for an insurance against heavier losses. Since the speculators are described as underwriters or insurers and the hedgers as insured, it is but natural that the insured should pay the premium to the insurer. This small loss incurred by genuine dealers is, however, a variable phenomenon and at times may largely be offset by similar gains in the opposite transactions. It therefore cannot form the main source of remuneration to the speculative class. It may further be inquired here as to what should be the principal source of his income. Since no statistical data on the point are available, it is difficult to get any enlightenment on this particular aspect of the subject. It may, however, be said that the main contribution comes probably not from producers, consumers or genuine dealers but from the very many small speculators drawn from the 'general public.'⁵ Generally speaking, these small dealers who buy and sell on the futures markets are neither close students of the situation nor familiar with conditions of supply and demand. Such outsiders possess neither good judgment nor keen business sense. Their activities are influenced more or less by tips and rumours rather than by keen analysis of market conditions. Hence, in the long run this class mostly loses and that brings some money to the professional speculators. Another source of remuneration to the speculative class is an occasional failure of a big speculator. He may misjudge the market and in consequence pay a heavy toll for his error. Mistaken speculators are penalised with the utmost severity. The amount they are called upon to pay makes the fund for others.

3. SHORT SELLING

The trading on a futures market takes the form of either first selling and later buying or first buying and later selling. The latter practice is common to both spot and futures while the former is mainly confined to speculation on an organised market. Traders on the exchange naturally fall into two classes representing the supply and demand forces. In the language of the exchange they are called 'bulls' and 'bears'.⁶ The 'bear' will express his opinion if he thinks that the price-level is higher than what it

⁴ The Economic Journal: F. Lavington, The Social Interest in Speculation, Vol. 23, p.40. See also Vol. 44 Stewart Blair, The Profits of Professional Speculators, p.415. See also Vol. 33, pp. 428-30 and 579-81. Discussions on the profits of Speculators.

⁵ Personal Investigation and see also J. G. Smith. Organised Product Markets: 1922, p.103.

⁶ A bull is a person who anticipates that the price will rise before he is called upon to accept delivery of the goods. This gives him an opportunity to sell at a profit before that date. A bear on the other hand, is a trader who anticipates that the price will decline before he is called upon to deliver the goods he may have sold. This gives him an opportunity to buy at a profit before that date.

should be by 'selling short'. Selling cotton without in hand with a view to buy back later at a lower price is 'short-selling'. The reverse of this is 'long buying'. The only difference between taking a long position and a short position is that in the first case a person buys first and sells later while in the second case, he sells first and buys later. In both cases, there must be a purchase as well as a sale.

Short-selling and total turnover of futures: Because a speculator when he thinks that prices are higher than what they ought to be comes forward and makes short-sales, it is popularly thought that he increases the turnover in a futures market for his own advantage. It is true that a short-seller is one of the factors making the huge total of the sale and purchase of futures contract but there are other factors as well. For instance, it may happen that a seller of cotton for future delivery has got the commodity in his possession and enters into a hedging sale as protection. Under no circumstances can this be regarded as a speculative short sale, although his position in the market appears as that of a short-seller. Again, there is no means of ascertaining whether a short-seller possesses cotton or not. It is equally difficult to decide whether a particular short sale is meant for speculative or hedging purposes.

Apart from this, the common argument that cotton is sold in a futures market so many times the actual crop in a country like India is erroneous in the sense that it gives the picture of one side only. The fact that cotton is also bought in the same market so many times the actual crop is lost sight of. For example, when 100 bales of Jarilla cotton are sold by an operator, he ordinarily buys them back as soon as the price movements tend to favour him so that a small differential gain may be pocketed. He thus buys and sells or sells and buys for a number of times in a day, week or month. In the course of his dealings he goes on adding to the total turnover of futures contracts. The volume is also increased by a merchant who uses futures against spot transactions. Similarly, a spinner, factory-owner, shipper and various other interests connected with the trade employ futures either for one purpose or the other and add to the total turnover of dealings in futures. Further, a dealer may find it necessary often to change the position of a futures contracts, e.g., from May futures to July futures contract. This changing of positions is a new transaction in futures and goes to increase the total. In the same way, 'badla' or straddling also adds to the volume. Now the fact should never be lost sight of that every hedger, straddler or speculator who might have sold a certain quantity has an obligation either to buy back before the due date of a futures contract or tender the cotton contracted for. A volume of futures contracts in any one year should therefore be much greater than the total out-turn of the crop which is made the basis for futures. In the absence of any

statistical data relating to the total turnover of futures contracts made upon the East India Cotton Association or any other futures market in India, it is difficult to give exact figures showing the volume of futures against that of the actual production of cotton. We have received several estimates in this connection. The estimates vary in figures, but the volume of transactions in futures contracts in India in any one year cannot be less than 15 times the total volume of our crop.⁷

Function of Short-selling: Since every short-seller is a potential buyer, the function of short-selling may be said to cushion the market from run away prices in either direction. A market without a short-seller might become a place of wide and violent price swings. The presence of a short-seller checks such wide fluctuations either upwards or downwards, by selling in the first instance and covering in the latter. At times, he spends a lot of money and energy to collect relevant data with a view that he may be able to judge more correctly the probable trend of the market. Short-selling enables dealers, manufacturers and shippers to enjoy the full benefits of a futures contract by making it possible for them to hedge their trade profits against losses through price fluctuations.

Short-Selling and Prices: It is not uncommon to hear in India from the producers' quarters that short-selling in a futures market like the E.I.C.A. tends to depress the price of their produce. If it were not for the enormous volume which futures trading has reached in Bombay it is probable that this feeling would be much less pronounced. It by no means follows, however, that the large sales of futures necessarily depress prices. The prejudice against short-selling in our country is largely due to the failure to appreciate its function. A short-seller neither interests himself nor wishes to go against the natural factors affecting prices. The history of organised speculation is a convincing evidence of the inability of short-sellers to defy natural conditions of supply and demand. Instead of constantly depressing prices, short-selling at times, contributes a potent factor in sustaining them. Any system which prevents extreme fluctuations on either side would tend to steady prices and be correspondingly beneficial. This is precisely what short-selling aims at accomplishing for the trade. A vast number of traders may be buying cotton for a rise at times when natural conditions do not justify an advance. It is just at this stage that a short-seller steps in. He sells short relying on his ability at a subsequent date to purchase the cotton at a lower price. His sales obviously tend to prevent the unwarranted advance from being realised. On the other hand, when, as a result of other conditions prices have fallen sharply, the fact that a short-seller

⁷ It is estimated that the total volume in the American cotton on the different markets of the world exceed 20 times the actual production of the crop in the U.S.A. in any one year.

must cover his sales by counter purchases contributes a sustaining influence of great importance. With a short interest in a market, the buying power develops almost immediately after a decline is started and opposes a downward tendency. It will be noticed that if short-selling has a depressing effect on a rising market it has an uplifting influence on a declining market as well. What really breaks a market in Bombay during a bear raid is the selling of weak and timid owners who do not reappear as buyers. Short-selling is as useful as long buying and both are equally beneficial in so far as they express an intelligent judgment of the probable trend of prices in a given market. As a matter of fact, short-selling does not prevent prices from eventually reaching a level either high or low warranted by conditions of supply and demand. It is not that short-sellers actually determine prices. All they do is simply to express their judgment as to what prices will be in the future. If they are mistaken they pay the penalty for their errors of judgment by having to enter the market and buy at higher prices. When the drop takes place they must become buyers to realise their profits. In this way an excessive drop in price is avoided. Short-selling therefore does not unduly tend to depress prices as is often asserted. It is instead a powerful agent in steadying them

4 MANIPULATION

It cannot be denied that there are circumstances under which the market may be manipulated by some speculators. Prices, at times, may be markedly influenced by their actions. The term 'manipulation' refers to the artificial raising or lowering of the price by operators through concentrated speculative dealings. Manipulation has many forms and degrees. Its chief method is to create false opinions as to the general conditions of supply and demand, e.g., some speculators in Bombay will lead the market generally to believe that they are working for a fall when really they are buying quietly and by indirect means much more largely than they are selling. Conversely, they will buy openly when they are really speculating for a fall. Its another method is to disseminate unauthentic news. Such news are calculated to influence prices without regard to the actual demand and supply position in a given market. To guard against such actions very severe penalties have been incorporated in the rules of the exchanges. For instance, every member of the E.I.C.A. is liable to payment of a fine, suspension or even expulsion for publishing any statement which is calculated 'to mislead the members and/or the public with regard to the state of the cotton trade, etc.'⁸

'Corners and Squeezes': The term manipulation also includes 'wash sales', 'matched-orders', 'squeezes', 'corners', etc. A corner is the towering form of manipulation. There is said to be a corner

⁸ Bsc Laws of the E.I.C.A., No. 17 (c)

when one speculator or a group of speculators secures possession of almost all the deliverable cotton. For instance, on May 27th, 1921 Broach was Rs. 327, Oomra Rs. 283 and Liverpool 8.49d. On August, 12th, Broach came down to Rs. 320, but Oomra went up to Rs. 326½, Liverpool advancing only to 8.60d. It will be noticed that Broach which was Rs. 44 - higher than Oomra on May 27th, was actually cheaper by Rs. 6½ on August 12th. This was the result of a corner in Oomra contract engineered by the late Mr. Omar Sobani.⁹ Broadly speaking, corners are of two kinds: those which are planned deliberately for the fleecing of shorts and those which are brought about unintentionally through an unavoidable set of circumstances. The usual method of effecting a corner engineered by a speculator is to buy all the offerings of short-sellers and to encourage them to go on selling until their sales exceed the amount of deliverable cotton. Manipulators then demand delivery in due course and refuse to settle except on their own terms. Since the manipulator gains nothing by absolutely ruining the shorts, the terms arranged are in the nature of a compromise. The victims are squeezed according to their financial standings. To be successful, the manipulators must have sufficient resources to acquire the necessary amount of the commodity. When the prices rise supplies from various sources would rush in. To maintain the corner the manipulator has to purchase all these supplies, otherwise, the shorts may make the best of them. Manipulators have thus to run great risk. They have to discount in advance any gain likely to result from the venture. When the corner aimed at becomes successful a temporary squeeze results. The price is driven up for the last few days of the contracted position and the shorts have but to settle.

A squeeze is a little corner in a particular position of the futures contract. This occurs frequently. For instance, on December 29th, 1924 Broach April/May was Rs. 456, Oomra December/January was Rs. 438 and Liverpool 13.28d. On January 23rd, 1925 when Liverpool went down to 12.85d. and Broach came down to Rs. 454, Oomra went up to Rs. 465.¹⁰ Similar cases occurred in 1930-31 when Oomra December/January was quoted at a premium of Rs. 15½ over April/May Broach and in 1934-35 when Broach April/May was squeezed and its price from Rs. 220 in March jumped up to Rs. 251 in May. A squeeze results rather from shortness of supply artificially created by one or the other factor than that caused by actual scarcity of cotton. The manipulator merely acquires control of the deliverable supply of cotton in a particular city where the exchange is located. He keeps his programme secret until near the end of the delivery period. Short-sellers of that particular position are obliged to make delivery by the last business day of the delivery

⁹ Bombay Cotton Annual No. 4, p.53. See also report of the Bombay Mallowners' Association for the year 1922, p.1.

¹⁰ Bombay Cotton Annual No. 6, p.10.

period. If they are unable to meet their commitments in time they are required to settle their contracts with the manipulator on his own terms. A commodity corner or squeeze cannot easily be contrived in the beginning or middle of the season but in the end it may be possible to squeeze the market.¹¹

Manipulation in the form of corners and squeezes is condemned by society because of the general feeling against tampering with prices, and the plight of the victims who have to accept unconditionally the terms dictated by the manipulators. Corners or squeezes constitute a menace to speculative markets and do not serve any useful economic function. When financed knowingly they represent a misuse of credit funds. They tend to disrupt the machinery of legitimate speculation and cause the gravest injustice to the market. When corners are attempted, the effective reply on the part of intended victims is counter manipulation. The corner can be broken by continuously selling short and forcing the cornerers to take not only the whole of the real supply but the artificial supply as well. This course is no doubt a bit risky for the shorts unless their capital and nerve are greater than those of the bulls. For the most effective and successful remedy one may therefore look to the organised market themselves. Authorities can prohibit trading in a particular futures contract, fix the settlement price of a particular position of a futures contract or the maximum and the minimum prices of a certain futures may be fixed for the entire season. For instance, the Board of the E.I.C.A. prohibited trading in July August 1924 Broach contract during the season 1923-24. The maximum rate for Broach was fixed at Rs. 700/- and rates for other contracts were also fixed and all trading except for settlement business was prohibited for several days¹². During the season 1929-30, the E.I.C.A. fixed the minimum price at Rs. 240 for July August Broach, Rs. 197 for July Oomra and Rs. 175 for July Bengal. Similarly, during the season 1930-31, the Board of the E.I.C.A. fixed minimum prices for the various contracts and trading in new crop was commenced earlier than the usual date.¹³ A further remedy that can be suggested is the development of public opinion against the manipulators.

'Wash-Sales and Matched-Orders': The traders of the present day do not favour corners or squeezes as a popular method of manipulation. This is largely attributable to the fact that the rules of an exchange now make it difficult, if not impossible, to carry out such an operation to its successful conclusion. But manipulation by means of 'wash-sales' and 'matched-orders' occurs from time to time on a futures market. Wash sales are fictitious tran-

11 In considering a corner or squeeze there are three major factors that must be taken into account and they are: (1) availability of cotton for tender, (2) the distance, of or creation of sizable short interest in a position and (3) activity of the market must be sufficient to accumulate a long position.

12 Bombay Cotton Annual No 5, p.8.

13 Indian Cotton Review for the season 1930-31, p.10.

sactions in which one broker arranges to sell to another at an artificially high price. Others being unaware of this arrangement are led to believe that there is genuine reason for the advance in prices. In case of matched orders a manipulator desiring to advance or depress the market gives simultaneous orders to different brokers with instructions to buy and sell at a certain price. The market can in this way be stirred to activity and the prices may be made to appear at a level-pre-determined by a manipulator. In most cases the brokers employed are ignorant of the object in view and they act in good faith. The success of the manipulators in these cases, however, depends mainly on the fact that the buying and selling brokers should not deal with others but among themselves. Though the exchanges have strict rules prohibiting such fictitious transactions there is no practical means by which they may be detected.

Uses and Abuses of Speculation: So far as evils resulting from manipulation or tampering with the markets are concerned it is probable that the system at times may aggravate the very condition it should correct, viz., extreme violence in price fluctuations. Such a condition would mean in most cases that the legitimate function of the speculative system is being perverted. It would also indicate that prices are being influenced by little more than pure gambling.¹⁴ The influence of this gambling element in the market at times has been great and it is useless to deny it.

A great weakness of the present speculative system is that there are too many people to supply futures contracts. Due either to the needs of other lines of business or absolute limitation of funds, they cannot stick through the long run and are wiped out by the first or second unexpected turn of the market. Individuals with little or no knowledge of the trade and lacking in the poise that accompanies ample financial resources and training constitute an undesirable element in the market. It is true that they serve to lend continuity to the market but against this advantage the adverse effect of those who fail and cause disturbance in the price cannot be overlooked. Speculation sometimes proves disastrous to many people. The evil is steadily increasing with the increasing number of inexperienced and lazy speculators who hope to earn a fortune by ready made astrological forecasts. For instance, we have come across a fairly large number of traders in Bombay, Ahmedabad and other places who mostly rely on astrological tips and base their operations on such forecasts. These dealers operate in the Bombay and Ahmedabad markets not because they are convinced by the economic facts relating to the conditions of supply and demand for Indian cotton, but because their astrolo-

¹⁴ "For a given time a single individual or a group of individuals supported by sufficient capital, may so disorganise the market as to deprive speculation of all its normal benefit." H. C. Emery: *Futures in the Grain Market: The Economic Journal*, Vol. 9, p.65.

gers have given them what they regard and value as most confidential tips regarding the effects of the movement of a particular 'star' or planet. They prefer this short cut to money-making to the hard work of a professional speculator. In fact, the speculator is a man of high professional attainment which these people lack. If it were possible it would certainly be desirable from a social as well as economic point of view to rid our market of the small and uninformed outside speculators because they bring with them the spirit of gambling.

As regards benefits a speculative system renders various advantages. For instance, it stimulates competition in the number of traders engaged in the business. The question is in what manner speculation is availed of. Speculation can certainly be made a very effective instrument in steadying prices in either direction and at the same time it may be used to carry prices to extremes by manipulation. What is therefore desirable for a predominantly agricultural country like India is not to abolish the speculative system but to limit its application to useful purposes only. In fact, speculation in India often bears the brunt of attacks which are really directed against gambling and manipulation. The cotton market in Bombay is often looked upon as an institution carried on for the purpose of gambling.¹⁵ This is a very erroneous view and does no justice to such an institution. Speculation is the necessary element in the maintenance of a balanced and a continuous market. Abuses follow uses but uses cannot be discontinued because of that. Speculation when harnessed by strict rules and put to the work of moving the crop is a great benefit to the society. Speculation is an aid to distribution of the staple. The part that speculation plays in the distribution of the crop is of immense importance to a producer, merchant and consumer in a country like India, because, we have in normal times to distribute 50% or more of our crop abroad and if there is no speculative market there would be no hedging facilities.¹⁶

The uses and abuses of speculation, in fact, have been the subject matter of endless discussion; but none can deny its healthy effects. The speculator's function is as much productive as that of the producer to whom he affords protection against a large amount of risk due to the uncertainty of future demand. But there are those especially in our country who take part in speculation simply by way of gambling. They bet upon the course of prices of the futures contract in Bombay without any knowledge of facts concerning the factors affecting the price level in India.¹⁷ Therefore the modern system of speculation in futures has proved itself a convenient scapegoat in Bombay for all the evils of the trade. Whether or not measures can be devised either by Government

15 Personal discussion.

16 Refer to Chapter on 'Hedging'.

17 Especially this is true so far as the Bombay Presidency is concerned.

or by institutions like the E.I.C.A. to put an end to the abuses of speculation in our markets without seriously disturbing its uses is a matter of great difficulty. In the light of these circumstances, it may be observed that the authorities concerned should see that any reform to do away with the evils of speculation should not tell upon its benefits.

5. EFFECTS OF SPECULATION UPON PRICES

There are three main considerations involved in studying the effects of speculation upon prices; whether speculation in futures depresses, advances or steadies the prices. These points represent conflicting views from the cotton world including those of the growers, spinners, merchants and speculators. For the sake of analysis it is proposed to give in the first place, methods of testing effects of speculation upon prices in a futures market like Bombay, secondly, a few recent studies made in this connection in other countries and finally, information received by us while making a personal investigation as well as the answers received to our questionnaire on this subject. This should enable us to observe the effects of speculation upon the cotton trade in general and prices in the Bombay futures market in particular.

Methods of testing effects of speculation upon prices: There are four possible methods of testing effects of speculation upon prices; viz., (1) to compare prices of the same commodity at the same time in different places, (2) to compare prices in the same market or in similar markets at different times, (3) to compare prices of different grades of the same commodity during the same period in the same market and (4) to compare prices of different commodities whose markets in most respects are similar except that some have and some have not facilities for futures trading. If we compare cotton prices in different parts of the world, we meet with the difficulty that the prices in the spot market are directly influenced by those in the futures market and vice versa.¹⁸ For instance the spot price of the Fine Punjab American cotton in Karachi on 4th January 1933 was Rs. 18 14 and its January futures price was Rs. 18 10. Similarly in Bombay the spot price of Fine Oomra cotton on 4th January 1939 was Rs. 152 and its December/January futures price was Rs. 149. Thus it will be noted that the prices in the spot market are not wholly independent of those in the futures market. The direct influence of futures may have been removed in the case of the trading in a spot market but its indirect influence remains. If we compare the prices of different grades of cotton, we meet with the same difficulty, because, the prices of the grades deliverable on futures contracts and those not so deliverable are interdependent. Moreover, either the two grades are substitutes in some degree in which case the price of futures contract influences the price of both or they are

¹⁸ Refer to Chapters on 'Hedging' and 'Prices'.

in no degree substitutes, in which case, the several conditions of demand may be wholly different. For instance, 'fine' and 'super-fine' or 'good' and 'fully-good' Broach are so close that they may be used as substitutes in some cases but 'fully-good' Broach and 'fully-good' Bengal are in no way substitutes and their demand depends upon other conditions. Hence, it is certain that the data cannot be freed from the influence of counteracting causes. If we compare the prices before the introduction of futures trading with those of futures, we meet with the difficulty of changed circumstances. The introduction of organised speculation has been accompanied by other changes such as, the introduction of telegraphic communication, the establishment of grading systems, the improvement of transport and storage facilities, etc. These changes collectively far outweigh in importance the advent of the futures trading or organised speculation.¹⁹ Comparisons of the price fluctuations of similar commodities such as cotton and jute or cotton and wheat present the difficulty that the prices are not entirely independent of one another. It should be pointed out that unfortunately, any one of these methods is subject to one or the other defect which prevents it from establishing the singular effects of speculation upon prices. In fact, it is admitted by economists that none of these methods is satisfactory.²⁰

Recent studies made to test effects of speculation upon prices: We may also refer in this connection to studies made abroad. Recently special studies have been made in some countries to scrutinise the effects of speculation upon prices. Amongst these the most conspicuous and authoritative documents are: (1) the Report of the Stamp Commission, 1931, Canada, (2) the Report of the International Chamber of Commerce, 1931 Paris, and (3) the Report of the Special Committee of the Chamber of Commerce of the U.S.A., 1930, Philadelphia.

(1) Report of the Stamp Commission: The Stamp Commission observes¹ that

"The general effect of futures trading on price fluctuations is to 'put on brake'. Instead of prices falling violently the fall is cushioned, it comes gradually in a series of small steps. Or conversely, instead of prices rising rapidly the rise is stepped up gradually. The total effect is that the market range—the spread between high and low prices—is reduced. Thus under

19 c.f. "If different periods are selected for comparison, so early a period has to be taken as representative of the times before 'futures' were in operation that economic condition wholly dissimilar from those of the present are brought into the problem as disturbing factors." S. J. Chapman and Knoop Douglas, "Anticipation in the Cotton Market", *The Economic Journal*, pp. 541-42.

20 c.f. "The influence of speculative marketing on prices", Usher *American Economic Review* Vol. 6, pp. 49-60. Usher concludes that the problem is not susceptible of direct statistical solution. See also *Economic Journal* Vol. 14, Chapman and Knoop, and Vol. 23, Livingston "Social interest in speculation". pp. 36-52.

21 Report of the Stamp Commission, 1931, p. 14.

futures trading, the daily, weekly, monthly and yearly ranges in price are smaller than these ranges would be without futures trading."

So far as the effects of speculation upon prices are concerned, the Commission concludes²² that

"The effect is certainly and materially to lessen major fluctuations in price extending from year to year and quarter to quarter. . . . The effect of the system with the features it involves in practical working is probably and more especially at times of active, natural or inevitable changes of price, to increase the minor short period oscillations round about the stabler fluctuations."

(2) **Report of the International Chamber of Commerce:** The report of the futures market Committee of International Chamber of Commerce maintains under the 'head' of speculation²³ that

"This necessary activity of the market also contributes to the smoothing out of violent fluctuations in prices. . . . It is true that futures trading being active entails more frequent oscillations in prices but over a long period there appears to be a close connection between trading in futures and reduction in the range of values."

(3) **Report of the U.S. Chamber of Commerce:** The report of the Special Committee of the Chamber of Commerce of the U.S.A. submits²⁴ that

"Futures trading has a tendency to bring closer together the price extremes of a given crop. There can be but little doubt that in many cases the intervention of speculative demand and speculative supply through the purchase and sale of futures has checked price movements and has reduced the range between the high and low prices."

Information received by us on the subject: It is appropriate to give the information received by us on the subject here. It may however be mentioned that we give below only a few selected but representative replies as it is not possible to reproduce all of them:

- (1) "Speculation cannot put up a price contrary to the dictates of supply and demand."
- (2) "Speculative transactions make for a steady market and help to prevent erratic fluctuations."
- (3) "Speculation has a great stabilising influence in the market."

²² On pp. 68 to 72 summary of conclusion is given.

²³ International Chamber of Commerce: Futures Trading, Brochure No. 10, 1931, pp. 15-16.

²⁴ Report of the Special Committee of the Chamber of Commerce of the U.S.A., 1930, p.28.

It will be noticed that according to the foreign studies and opinions received by us speculation in futures has a steadying effect upon the price level. It has the effect of keeping price fluctuations within narrow limits. Since the interest of the speculative class lies in that of the trade as a whole, they can only make a profit and survive while serving the society.

Conclusion: The conclusion therefore in regard to the effects of speculation should rest entirely upon theoretical reasoning. So many other factors enter the situation alongside the influence of speculation that it is very difficult to isolate its effects upon prices. The prices in a futures market are determined by the existing supply and demand which when taken as effective tend to be speculative because they are dependent upon conditions in other markets, and on judgment concerning the future. Future supply and demand in turn exert their influence over the present speculative supply and demand and the price is also affected by them. A speculator deals mostly in estimates of future prices. The question therefore is whether the speculative increase of supply really tends to depress the price and vice versa. It cannot be denied that the increase of supply whether artificial or genuine should tend to depress prices. The point to be considered is how far the speculative increase of supply succeeds actually in depressing prices. It will be admitted that this should depend upon the strength of demand. Speculators usually hold divergent opinions as to the probable supply and demand and one section must be wrong. This very divergence of opinion tends to prevent extremely violent variations. A bear speculator cannot depress prices by selling artificial cotton indefinitely in as much as, a bull speculator will become equally active and his purchases will raise the price. The combined effects of speculative buying and selling should be to cause prices to rise or fall in advance of changing conditions and to remove the extremes in price which would otherwise result. It is not only in a falling market that profits can be made. It is easy to create an artificial demand just as to create an artificial supply. It cannot be gainsaid that bulls are in any way less enterprising than bears. Contrary to the general belief (a) of agriculturists, that speculation depresses the price and (b) of spinners, that it advances the price those who have studied the subject maintain that speculation subsides violent fluctuations and has no permanent tendency in either direction. Instead they hold that speculation brings about earlier a correct price level than it would otherwise be established. Where a speculative market is free fluctuations in prices otherwise violent and disastrous, ordinarily become gradual and comparatively harmless. Since every speculative transaction is at one time a purchase and a sale at the other, it must have a salutary effect in stabilising prices. A professional dealer in a market is not for the purpose of either depressing or raising prices. He is as ready to make money on a rise as on a fall. In either case, he tries to ascertain what the probable

tendency of the market would be before embarking on any undertaking. In so far as the question whether speculation in futures depresses or advances the price is concerned, it may thus be observed that the purchases of those who buy because their investigations lead them to conclude that the supply is likely to run short or sales of those who sell since they are convinced that the supply has been underrated, would certainly tend neither to unduly advance nor to unduly depress prices.

As to the effects of bringing about steadiness or unsteadiness in prices, it may be said that speculation tends to concentrate all the factors influencing prices in a given market. Price differences between different places and positions of a futures contract are eliminated by 'badla' operations. One reason why speculation in futures should promote stability of prices is that it stimulates the collection of all sorts of information bearing upon the prices. As information is gathered and disseminated the opportunity for violent price movements would be restricted in any market. The tendency of speculation to steady prices largely rests on the informative service of the market. The dissemination of information should bring about the readjustment of prices from the time the changes in conditions are first noted. Fluctuations arising from causes that can be foreseen are therefore discounted in advance. The natural result of such readjustment would be to reduce the violence of price fluctuations, because, the anticipation of changes in the future price affects the present market prices. On the other hand, speculation makes a market more sensitive to every change in condition of domestic as well as world supply and demand for a commodity. The futures market is more mobile than the spot market. Fluctuations, if less violent are more frequent in futures prices. For instance, today the slightest change in the supply or demand for Indian cotton exercises more influence on the prices of the futures contract in Bombay than it ever did before. In fact, the more perfect the speculative market becomes the more sensitive it is to every change in conditions calculated to affect the price level in a given market. This will result in a state of less violent but more frequent fluctuations in futures prices. The factors responsible for bringing about this frequency in the price of 'futures' are: (a) in the futures market there is more scope for reasoned imagination than in the spot market, (b) a far greater quantity of business takes place in futures than in spot and (c) the deal in futures is very rapidly effected. Therefore the frequency in price fluctuations tends to be increased though its degree or extent is reduced.

It should, however, be observed that speculation especially in our markets at times is responsible for increased fluctuations in the price of the futures contract. The possibility of manipulation in the Bombay market is a case in point. There is also an opportunity for registering the influences of panic in business at Bombay

and trade cycles in India. Moreover, the unreasonable excitement of the outside public sometimes tends to cause violent movements in price of Indian cotton. At the same time it should not be forgotten that cases of manipulation panic influence or public excitement are rare nowadays in Bombay and of short duration when they occur. On the whole, it seems safe to observe that under normal circumstances, dealings in futures have steadying effects on cotton prices. Buying and selling by professional dealers should tend to steady prices.

CHAPTER XI

PARITY DIFFERENCES AND BADLA OPERATIONS

PARITY difference is a vague phrase in the cotton world and sometimes misleading too. Speculation at times causes irregular movements in different cotton markets all over the world. It is a common conception that parity difference reflects all sorts of differences among various kinds of world cotton. These variations are generally understood to be 'parity differences'. These differences give rise to 'straddle' operations or what is generally known in India as 'badla' business. It will therefore be our purpose first to explain the meaning of parity difference and then to examine its relation with badla operations and finally to deal with badla business in this chapter.

1. PARITY DIFFERENCE

Meaning of the Phrase 'Parity Difference': The phrase 'parity difference' denotes the difference in the prices of two contracts based on the same growth; e.g. the price of the May position of the American middling in Liverpool and that of the May position of Middling in New York on a given day. But in India the phrase 'parity difference' is given a technical meaning. The 'parity difference' in our markets will denote the difference in prices of the two different futures contracts, based on two different growths; e.g. the price of the May position of the futures contract in Bombay and that of the May position of the American middling in Liverpool on a particular day. In our market parlance, thus, 'parity difference' refers to the price difference between any two kinds of cotton contracts such as Jarilla and middling, Sakel and Jarilla, etc.¹

Its principle: The theory on which the idea of parity difference is based is that if a market is nearer to the source of production the commodity should be cheaper there than in a distant market since shipping expenses will have to be incurred in the latter case. In cases where merchants have to purchase cotton from any two distant sources of production they take into account the comparative prices including the cost of transport and other charges. For instance, a cotton importer in Japan will consider before making any purchase the difference between the prices of American and Indian cotton. This comparison of the prices of different growths will give him the general idea of the parity difference between them. If he finds that American cotton is comparatively cheaper than Indian, he will arrange his programme of purchasing cotton

¹ "The expression 'parity of cotton' is used to denote comparative or relative price. The parity of Indian cotton in general parlance means the price of Indian cotton as compared with the price of American cotton." R. G. Saraiya: Speech delivered at the Sydenham College of Commerce & Economics, 26th Feb, 1935.

accordingly. For practical purposes, however, it may be said that, other things being equal, the parity difference generally relates to the price of cotton plus the cost of freight, insurance and other incidental charges between any two organised futures markets either abroad or within a particular country. When the markets go out of line, parity difference is regarded as either widened or narrowed as the case may be and the prices of two futures contracts are understood to be relatively high or low between two given markets.

Methods of Finding Out Parity Differences: There are two methods to find out parity difference, namely, (a) the reduction of the prices of any two futures contracts to a common denominator and (b) ascertaining the intrinsic value of different growths.

(a) **The reduction of the prices of any two futures contracts to a common denominator:** For the purpose of arriving at parity difference between the prices of any two futures contracts let us take an illustration of the Middling at New York and the Jarilla at Bombay and compare their respective quotations on a given day. The middling and the Jarilla do not mean one and the same kind of cotton. What these different contracts represent may then be analysed here. In the first place, the quotations for the two contracts mean the price of Middling cotton in New York on a particular day and that of Jarilla cotton in Bombay on the same day. These prices are expressed in the respective currencies of the countries, cents in America and rupees in India. The quantity quoted for is another point of difference. The Middling price stands for one lb. gross weight, while the Jarilla price is for a candy equivalent to 784 lbs net weight. There is a great deal of variation in standards. In New York 'Middling upland' is taken as basis whereas in Bombay it is 'Fine M.G.' Jarilla. Staple length of both also differs. The Middling has 7 8" as the staple length while the Jarilla has 3 4". Finally, on the New York contract, cotton can be delivered at any one of the designated places, while on the Bombay contract it can be delivered only in Bombay. Similarly, examples may be taken of American cotton in New York and Liverpool, Egyptian cotton in Liverpool and Alexandria, and Egyptian and Indian cotton in a market like Bombay or Liverpool. In order to arrive at the correct difference in the prices one has thus to take into account all these points of variations between any two futures contracts.

To indicate the price difference it is obviously necessary that the price of one futures contract be converted into the terms and currency of the other. This requires a definite method. The method for finding out parity differences between different countries is given below.

To compare Bombay with Liverpool prices: One should convert the former from a rupee per candy basis to a pence per lb. basis

at the ruling rate of exchange between India and England and then compare the same with Liverpool quotation and vice versa. For instance, taking the quotations on December 2nd, 1940, say, Liverpool at 6-80d. per lb. works out at Rs. 296 per candy at 1/6 exchange. The Bombay quotation on that day was Rs. 236. This works out to Rs. 60/- lower than Liverpool as parity difference.

Similarly parity between New York and Bombay can be obtained by reducing the cents per lb. to rupees per candy at the current rate of rupee-dollar exchange and comparing with Indian quotations and vice versa. For instance, taking the quotation on December 2nd, 1934, say, New York at 12.80 cents and the rupee-dollar cross rate 2.70, one arrives at a price of New York at Rs. 271 per candy which comes to Rs. 287, if allowance² is made for the net and gross weights. The Bombay quotation at Rs. 236 on that day works out to Rs. 287 minus Rs. 236, i.e. Rs. 51 lower than New York as parity difference.

All these points may be expressed in a simple mathematical formula as follows:

To find out parity difference, multiply the price of a particular position in a certain market by weight in lbs. and divide the multiplication by the ruling rate of exchange between the two countries. From that amount deduct the prevailing price of that particular position in that market and the result will be the parity difference in the currency of that country. OR, multiply the price by exchange ratio and divide the multiplication by weight in lbs. and by subtracting the same from the prevailing price it will result in the establishment of parity difference between the prices of two countries.³

2 Allowance should be made for tare in case of New York price, since, it represents a gross weight and not the net one as in the case of Bombay or Liverpool. This tare is conventionally estimated at 6½% and so much will have to be added to the price arrived at after its conversion.

3 This formula may further be reduced to an algebraic equation which is as under:

(i) Parity difference between Bombay and Liverpool:

Bombay: $\frac{\text{Liverpool price} \times 784 \text{ lbs.}}{\text{Rate of exchange}}$ —the prevailing price

Rate of exchange
 $\text{=Parity difference in Rs.}$

Liverpool: $\frac{\text{Bombay Price} \times \text{Rate of exchange}}{784 \text{ lbs.}}$

=so many d. per lb.

and by subtracting this from the prevailing price in Liverpool, parity difference in pence points will be obtained.

(ii) Parity difference between Bombay and New York:

Bombay: $\frac{\text{New York price} \times 784 \text{ lbs.}}{\text{Rupee-dollar exchange.}}$ —the prevailing price

$\text{Rupee-dollar exchange.}$
 $\text{=Parity difference in Rupees.}$

New York: $\frac{\text{Bombay price} \times \text{Rupee-dollar exchange}}{784 \text{ lbs.}}$

=So many cents per lb.

and by subtracting this from the prevailing price in New York, parity difference in cent points will be obtained.

(b) **Ascertaining the intrinsic value of any two different growths:** Another method of arriving at the parity difference is to ascertain the intrinsic value of any two growths. To find out the intrinsic value, the quality difference of different growths must be accounted for. The common belief is that there is a definite relationship between all kinds of cotton, say, Indian and American, which is reflected in their intrinsic values. This can be determined by various factors such as strength, staple length, grade, colour, etc., or what is known as 'Spinning performances'. Difficulty, however, is that the spinning difference is simply one of the factors affecting price relationship. Hence, there could not be any fixed ratio of intrinsic value between the two varieties.

There are some traders who, however, believe that this relationship is always fixed.⁴ They are under the wrong impression that parity difference is a fixed thing. Not only do they imagine that parity difference is fixed, but they also act upon this belief. To this class of people it may be pointed out that under any circumstances there can never be anything like a fixed price difference in existence. Parity difference simply indicates a certain and not at all a fixed relationship at a particular time. On the contrary, this difference is more or less a constantly varying function. Those who imagine that there is a fixed parity difference act on the idea that if there is a disturbance in it, it would be a paying proposition to operate and take the full advantage of it. Unfortunately, when they actually operate under such unwarranted assumption, they are likely to burn their fingers.

Assumption of 'Normal Parity Difference': Let us now ascertain whether there exists any tendency in this relationship which can be termed as 'normal parity difference'. Parity difference for practical purposes is expressed in two ways: (i) Rupees or points and (ii) percentage.

(i) **Rupees or points:** For the purpose of entering into badla business a comparison of prices after making due allowance for intrinsic value has been found useful from trade experience. Let us therefore assume that Broach in Bombay is, as a rule, Rs. 40/- lower than Middling in New York because of its inferior spinning performance.⁵ For instance, suppose Broach April/May futures

4 For practical purposes they follow the rough and ready method of calculating parity difference. 'A change of 1 points in the price of the Middling New York or that of 275 points in the price of the American Middling in Liverpool would mean a corresponding change of one rupee in the price of the Broach in India. Still others work on the basis of Liverpool. 1 point = annas six in India and New York one point = annas three. This may be considered hardly scientific.—Personal investigation.

5 Our inquiry has revealed that this figure at present be taken as the probable assumption in the case of New York prices. Some take Rs. 50/- as normal. However, this is a matter of opinion and not a fixed thing since there are various difficulties in arriving at the exact intrinsic quality value difference.

on March 16th, 1939, was quoted at Rs. 155 and New York May at 8.33 cents. The T/T Bombay on New York was 2.86. The parity difference will be 1.44 cents or Rs. 30/-. Taking the assumption of Rs. 40/- as normal, this will signify that there is a difference of Rs. 10/- in favour of Broach on that day. Similarly, the example of Liverpool-Bombay may be taken. In the case of Liverpool Rs. 50/- may be regarded as the 'normal parity difference'.⁶ Taking Liverpool May at 4.43d. on 3rd August, 1939 and the rate of exchange at 1/6, we get Rs. 193 out of which the price of Broach, Rs. 154 on that day may be deducted. The net difference would be Rs. 39. Taking the assumption of Rs. 50/- as normal this will signify that there is a difference of Rs. 11/- in favour of Broach on that day. Conversely, if we take Broach April/May at Rs. 154 and Liverpool May at 4.43d. and the rate of exchange at 1/6 we get 3.50d. By subtracting 3.50d. from 4.43d. we get the difference of .93. Parity difference in these cases have been stated in either rupees or points and they therefore are known as 'rupee-parity difference' and 'cent or pence points-parity difference'. It is necessary to emphasise that the figures of Rs. 40/- in the case of New York-Bombay and Rs. 50 in case of Liverpool-Bombay are nothing but pure assumptions and the actual figures may be different on any day. As a matter of fact, parity difference varies with the variation in prices. The higher the price, the higher will be the parity difference and vice versa.

(ii) **Percentage:** Another way of expressing parity difference is that of assuming normal percentage difference between the prices of two futures contracts. At present the Jarilla cotton might be taken at 10% intrinsically lower in value than the Middling in New York and the relative parity difference be watched accordingly. In the case of Bombay-Liverpool, normal parity difference may be assumed at 20%. Any percentage higher or lower than 10 or 20% respectively will be stated as so many per cent higher or lower than normal parity difference. But here also the fact that parity difference is not a fixed quantum remains intact, since, 10% or 20% of today might become 15% or 25% of tomorrow.⁷

Advantages of expressing parity difference in percentage: The advantage of percentage parity difference over the point or rupee parity difference is that it gives a comparatively better idea of prices. It also gives us an average idea on both sides whereas the point or rupee parity difference indicates one-sided general idea

6 Personal enquiry

7 Instead of assuming anything as normal parity difference it may be suggested that a most scientific method of arriving at normal price differences will be to take into account the quotations of spot sales of Jarilla and Middling from the buyers' market such as Osaka or Liverpool for five years with due consideration of expenses from Bombay and New York to Osaka or Liverpool. Then the mean of five years' prices will have to be worked out in order to establish the parity difference between them and finally, the result may be turned into percentages.

only. In the case of higher prices, the parity difference expressed in the latter form becomes the absolute figure which might sometimes mislead an operator. If the prices are higher or lower, the assumptions in the above-mentioned cases of Rs. 40/- in the case of New York-Bombay and Rs. 50/- in the case of Liverpool-Bombay will be changed, and the proportion of parity differences will not be correctly reflected in either points or rupees. The proportions will rather be magnified or contracted as the case may be, e.g. if Liverpool cotton is a shilling a lb. the value of Bombay will not be Rs. 50/- lower but possibly Rs. 100/-. If it is worked out in the percentage form, the difference will be in percentage and not in absolute prices.

One example may be actually worked out in order to complete our discussion on percentage system of calculating parity. Suppose the Liverpool quotation on 4th August 1939 is 4.41d. then calculating as usual we get 3.52d. for Broach. Now if we take 100 for 4.41d. we would get 79.8 for 3.52d. which comes to 20.2% as percentage difference. Thus instead of stating .89d. as parity difference it might be expressed as 20.2% as parity difference between the two futures markets.

TABLE SHOWING PARITY DIFFERENCE IN PERCENTAGE

Liverpool (May American) & Bombay (April-May Broach): Bombay Prices converted to Liverpool Equivalent at Exchange 1/6 per Re.

Months	1934-35			1935-36			1936-37		
	Bombay, Re.	Liverpool d.	Diff. in percent.	Bombay, Re.	Liverpool d.	Diff. in percent.	Bombay, Re.	Liverpool d.	Diff. in percent.
May	194	5.74	22.97	226	6.23	16.54	196	5.58	19.18
June	217	6.36	21.54	212	5.92	17.57	210	5.86	17.58
July	228	6.70	22.83	224	6.12	15.85	226	6.58	20.97
Aug	231	6.92	23.27	204	5.77	18.72	215	6.33	21.80
Sept	217	6.75	26.07	198	5.71	20.32	222	6.46	20.90
Oct	210	6.58	26.60	217	6.00	18.06	220	6.67	24.14
Nov.	214	6.52	24.54	225	6.34	18.30	216	6.45	22.95
Dec	227	6.73	22.44	220	6.26	19.17	224	6.71	23.25
Jan.	240	6.81	18.94	205	5.86	19.45	230	6.87	23.00
Feb	245	6.72	16.07	198	5.82	21.82	225	7.01	26.11
Mar.	228	6.42	18.38	195	5.84	23.29	238	7.75	29.42
April	238	6.49	15.72	198	6.11	25.53	244	7.50	25.20

8 Based on data supplied by Messrs. Devkaran Nanjee, Bombay.

Months.	1937-38			1938-39		
	Bomba. Rs.	Liverpool. d.	Diff in per cent	Bombay. Rs.	Liverpool d.	Diff in per cent.
May	240	6.98	20.92	174	4.96	19.35
June	232	6.75	20.89	161	4.57	19.04
July	227	6.86	23.91	168	4.90	21.23
August	200	5.92	22.30	156	4.73	24.32
September	183	5.29	20.42	152	4.66	25.11
October	165	4.78	20.71	155	4.80	25.84
November	160	4.63	20.52	160	4.86	24.28
December	167	4.68	17.95	157	4.60	21.52
January	177	4.94	17.61	158	4.79	24.00
February	176	5.02	19.33	151	4.62	24.68
March	168	4.92	21.55	154	4.97	28.57
April	160	4.74	22.36	152	4.48	22.10

2. FACTORS AFFECTING PARITY DIFFERENCE

The undermentioned factors play an important role in the determination of parity difference: (a) Comparative supply and demand, (b) Quality of the crop, (c) Transport charges, (d) Rate of exchange, (e) Price regulations, (f) Tariff walls, (g) Technical factors, (h) General outlook, (i) Local conditions, (j) War period.

Comparative Supply and Demand: The first and foremost factor that considerably affects parity difference is the relative supply and demand of cotton in any two markets. In the case of a small crop in India, the supply of Indian cotton will be restricted and the demand being constant prices will rise. This will be reflected in parity difference with foreign cotton. There was really such a situation in 1931-32, when our crop was only 4.6 million bales. There was a famine in Oomra tracts. The demand became so great that the Oomra December, January contract lost its normal relations with Broach, and was quoted at higher prices. The result was that the Bombay market improved rapidly. It was then considered to be a profitable proposition to import American cotton which was comparatively cheaper and actual purchases were made in America for importation into India. This was the natural sequence of prices which before the commencement of the delivery period ruled about as high as American cotton. A reverse case may also be noted. The American supply for 1937-38 was a large one of 18.9 million bales and had its reflections on prices and parity difference of the world cotton.⁹

9 "Parity difference between Indian cotton and the American varied from 2.66 cents on March 25th to .15 cents on 23rd Sept. 1937 when New York May prices stood at 14.03 cents and Broach April/May at Rs. 272 and at 8.84 cents and Rs. 183 respectively." Indian Cotton Review: 1937-38, p.29.

Quality of the Crop: The character of the crop also affects parity difference. Suppose a certain crop contains a smaller percentage of better staples. The demand for stapled varieties will be greater and hence, the prices will be relatively higher for them. For example India now produces about 25 lakhs of bales of long staple cotton, the demand for which is always comparatively greater than that for other styles. In consequence, they fetch high prices. Similarly, if the American crop contains a greater proportion of better quality and staple, it will command higher prices in the world's crop, other factors being the same.

Transport Charges: The next factor is the cost of transport including freight rate, insurance and such incidental charges. In the case of similar growths, e.g. Liverpool-American Middling and New York Middling, basis being more or less the same the transport charges greatly affect the parity difference between the two. The case of Indian cotton is different. Our cotton has to enter into competition with American and other growths in the world market, and therefore shipping expenses are more important to India. Since our cotton is inferior to that of the U.S.A., this factor plays a more important part by way of keeping the price of Indian cotton in line or out of line with that of the U.S.A. As a matter of fact, freight rate is not a fixed charge but is determined by the demand and supply of ocean tonnage and thus varies from time to time. Sometimes, transport charges are subject to political situations. For instance, from July 1939 onwards, the political situation in Europe became ominous. War looked imminent and among various things, war-risk insurance charges and freight rates were raised in India. As a result, the Indo-American parity difference was narrowed down from 2.17 cents on July 27th 1939 to 1.57 cents on 15th August 1939.

Rate of Exchange: The rate of exchange has a direct bearing on the calculation of parity difference. Prior to 1914 when only slight variations occurred from day to day in the foreign exchange, it was not so important a factor as it is at present. Further, the value of the pound sterling has a direct effect on the price of cotton. England went 'off' gold in September 1931, and the price of cotton in Liverpool went up with every fall in the London-New York Cross-rate. In Bombay also partly for the same reasons, and partly for the fact that the rupee was divorced from gold and linked to sterling, cotton prices soared high. But the buoyancy that was prevalent in Liverpool and Bombay was absent in New York. This upset the parity difference between the Middling in New York and Broach in Bombay or American Middling in Liverpool to a considerable extent. The depreciation of the rupee for example, was only about 30% while Indian cotton was 70% higher in price. The correction towards normal parity difference took place during March. Later on when the U.S.A. devalued the dollar this factor

achieved overwhelmingly greater importance than any other single consideration. For example, the behaviour of the £ which depreciated by stages from 4.85 7/16 dollars on 1st Sept. 1938 to 4.64 13/16 dollars on 30th December 1938 and to 4.32 dollars on 31st August, 1939, occasionally brought about the rapid narrowing in parity difference between New York and Liverpool and New York and Bombay. Thus prices may go up and down with the probable fluctuations in the rate of exchange and parity differences would be affected to that extent.

Price Regulations: A factor that has recently entered into the arena of calculating parity differences is the State attempts at the stabilisation of the price of cotton. The State in some countries buys the surplus cotton and tries to prevent a decline in price by way of backing up the market. This upsets the market relations and ultimately the parity differences. A recent example of this kind is furnished by the announcement of a loan to farmers by the U.S.A. authorities on 27th August, 1938. It prevented a fall in the American cotton prices which ordinarily should have taken place in view of a crop of 12 million bales during 1938-39. In India there being no such price-pegging scheme in operation, the market recorded a decline in prices. The inescapable result was that the Indo-American parity difference widened from .99 cent per lb. on 1st September, 1938 to 1.48 cents on 23rd March, 1939. Secondly, President Roosevelt emphasised in a special message in April, 1939, the administration's desire to increase cotton exports with the help of subsidy and the Indo-American parity difference widened further to 1.58 cents on April 27th and 2.33 cents on June 29th, 1939. These facts go to show that artificial price regulations exercise a powerful influence on parity differences.

Tariff Walls: Import duty on raw cotton has its repercussions on difference in price of cotton. This will be particularly obvious in the case of long staple cotton in India. If the foreign cotton has to pay import duty that amount should be added to its price before arriving at parity difference between the two. Any import duty imposed on outside growth would tend to keep the internal price of better varieties relatively higher. It will also render the imports of foreign cotton uneconomic and unremunerative for spinners. For example imports of foreign cotton in India declined from 7,27,000 bales in 1937-38 to 4,01,000 bales in 1938-39. This decline was largely due to the doubling of import duty by the Government of India with effect from 1st March, 1939. The New York-Bombay parity difference shrank from 1.48 cents per lb. to 1.22 cents during April, 1939. This really meant a parity difference of 3.39 cents per lb. due to the higher duty of 2.17 cents per lb. This amply explains the importance of tariffs in parity calculations.

Technical Factors: Mention should also be made of the set of factors that sometimes influences cotton prices and causes them to remain high or low affecting thereby the parity difference. These are known as 'technical factors'. Among them the most conspicuous are the attempt at corner, squeeze, etc. Manipulation at times affects the parity difference. An attempt to tamper with any particular position of a futures contract by manipulating the spot rates has also a temporary effect on price and parity difference is disturbed in consequence.

General Outlook: World-wide business conditions and economic as well as political outlook are some of the general factors that affect parity difference.

Local Conditions: Local conditions also affect parity difference. The effect varies with the higher or lower level of prices in a given market.

War Period: If we compare the range of fluctuations in the price of Broach in Bombay with the range of fluctuations in that of Middling in New York, we find that Broach lost all its normal price relationship with Middling during the period of war. The parity difference between the prices of Broach and Middling varied from a discount of 1.49 cent points for Broach or minus 17.4% in the beginning of September 1939 to a premium of 1.47 cent points or plus 14.1% over Middling in the middle of December 1939. At this stage, along with the changes in the respective prices the parity difference took a reverse turn and it got widened to the maximum discount of 4.57 cent points for Broach or 44.1% in the first week of July 1940. It will be noticed that Broach cotton which was dear by 1.47 cent points or 14.1% in the middle of December 1939 became cheap by 4.57 cent points or 44.1% in the beginning of July 1940. This tendency continued during the second year of War. A gap in the price-spread between the U.S.A. and Indian cotton widened and became violent by the end of the season 1940-41. For instance, the price parity between the two cottons widened from 103 cent points per lb. on September 5, 1940 to 651 cent points on August 28, 1941. In consequence, our imports of the American cotton during 1940-41 were reduced by 97% as compared with the imports of the previous season. Among other factors responsible for this drastic decline in imports were, of course, the transportation and exchange shortages.

3. RELATION BETWEEN PARITY DIFFERENCE AND BADLA BUSINESS

Having explained the conception of parity difference and the factors responsible for the same, we should now determine its relation with the badla business. For this purpose, we shall have to define the word 'badla' or what is known in other countries as 'straddle'.

Definition of the word 'Badla' or 'Straddle': The term 'badla' or 'straddle' is constantly used in the Bombay market particularly since the World War of 1914-18. A 'badla' operation consists of any transaction which implies bridging the gap or covering the spread between the prices of the two futures contracts, by buying the one which seems comparatively low in price at the moment and selling the other which is relatively high.¹⁰ Badla operations also consist of simultaneous buying for delivery in one month and selling in another in the same market. For instance, suppose a dealer in Bombay buys 100 bales May futures at Rs. 400 per candy and sells the same quantity of July futures at Rs. 410 per candy. Then whether prices rise or fall as a whole, he gains if the difference between the two prices becomes less than Rs. 10/- in this case, but if it becomes more, he loses. On the other hand, had the dealer bought July at Rs. 410 and sold May at Rs. 400 he would have gained in the case of the difference increasing and lost in the case of its decreasing. Badlas are nothing but operations based on differences between the prices of two different or same qualities of cotton or two different markets such as Bombay and Liverpool. The dealer in badla may operate in one way so as to gain if the difference upon which he is speculating increases, and in another way so as to gain if the difference decreases. His gains or losses are in no way affected by upward or downward movements of the market as a whole, because, he is mainly concerned with the difference or what is known in India as 'Gala' between the prices of two contracts. Badla business therefore is regarded as one of the most highly specialised forms of trade activity on the leading futures markets, like Bombay, New York, etc.

Various kinds of Badla Operations: There are various kinds of badla operations: (a) A badla between a near and distant month in the same market,¹¹ e.g. May and July futures in Bombay, (b) A badla between two different kinds of cotton, say, Broach and Oomra, in one market like Bombay or American Middling and Uppers in Liverpool, (c) A badla between two different markets, say, buying Jarilla in Bombay and selling 4F in Karachi or buying Sakels in Alexandria and selling Middling in New York, (d) A badla between two different commodities, i.e. purchase of one commodity like cotton against sale of a different commodity such as wheat or jute, both of which should normally be closely allied in price movements. This may be in one city, country, or

10 "A straddle means a transaction in cotton for Future delivery in which contracts are made either (i) for the purchase of a certain number of bales of one growth for a certain period of delivery and for the sale of an equal number of bales of the same growth for another period of delivery, or (ii) for the purchase of a certain number of bales of one growth for a certain period of delivery and the sale of an equivalent or approximately equivalent in weight of another growth of the same or another period of delivery." Rules of the Liverpool Cotton Association: Rule No. 27.

11 This is strictly known as 'Switching'.

between different countries. For example, sale of cotton against purchase of seeds in Bombay or sale of cereal like Barley and Oats in Chicago against purchase of cotton in New York. Thus, there are four main kinds of badla operations.

Spread between spot and futures prices: There is still another type of badla business in existence. The badla between prices of futures and spot cotton is commonly called 'a spot-futures spread'.¹² Suppose futures contract is ruling at Rs. 475 and the spot cotton is higher or lower than futures on account of various internal causes such as supply relative to demand for a specified growth. Against the futures, Surat, Navsari, etc. can be tendered at market differences. But due to better demand for these varieties they may command higher premium on spot. Further, suppose the supply of Dholera is greater than trade requirements. It will then be discounted in spite of the fact that it is tenderable against the Jarilla contract and it must fetch the prevailing prices. This difference in either premium or discount is known as 'spot-futures spread'.

Badla Business and Parity Difference: Parity difference and badla difference are interconnected and go together. One affects the buying and selling operations in different markets and the other helps in bringing about the necessary adjustment of prices. The purpose of badla operations is to take advantage of a temporary disparity in anticipation of what should logically happen. Badla is thus an operation whereas parity difference is a guide by which operators come to know of the most attractive contract position or market. Their relationship may be expressed by saying that parity difference gives rise to badla business which in turn aids in the maintenance of normal price differences between different months and markets. Badla business refers to trading operations while parity difference points out differences in prices of two kinds of cotton. The entire badla business is based on price differences since it depends upon the calculations of parity differences. Parity difference between two markets or positions of contracts on a certain date induces a trader to enter into badla business as recommended by the then ruling price differences. Thus, parity difference and badla operations are closely related terms; one is the cause and the other is the effect.

4. BADLA OR STRADDLE OPERATIONS BETWEEN THE WORLD MARKETS

Position of Badla Business in other than cotton markets: The position of badla business in other than cotton markets may be reviewed here. It is not only in the cotton trade that badla operations are put through but this kind of trading is carried on in all organised markets of the world whether for commodities or

¹² Refer to Chapter on 'Hedging'.

securities. The terminology differs according to the business. On the stock exchange, badla business is known as 'arbitrage' dealing. In the grain market, it is called 'spreading'.¹³ Hence, they can be called more or less synonymous. An operator dealing in this kind of business is known as a 'straddler' in cotton trade, a 'spreader' in grain trade and an 'arbitrager' in stock and securities.

Badla or Straddle Operations within a country: Badla business finds its real field within the limits of a particular country. The advantage of carrying on badla transactions within a country is that the dealer has not to refer to the exchange rate and such other factors. For example, Ahmedabad traders sell in Bombay when the two prices go out of line and buy in Ahmedabad. In such cases the operator may be prepared to take or give delivery against his badla operations at current prices, because, he believes that by the time of delivery, Jarilla will have higher price or because, at some point before delivery date he will be able to enter into a reverse transaction at a profit. In Karachi, dealers sell in Bombay against their purchase of 4F. This entails a conversion of Karachi maunds into Bombay candy. If 4F rules at Rs. 34 on 3rd January 1940, they work it out at Rs. 324 per candy in Bombay. Suppose the Broach on that date is Rs. 320. There is thus a price difference of Rs. 4/-. This may not be in accordance with the assumption of normal parity difference and badla business takes place. Moreover, regular badla business is going on between two different growths of the same commodity in the same market. Suppose a merchant in Bombay thinks that Oomra is lower and Broach is higher than warranted by a normal spread between the two contracts. He buys Oomra and sells Broach against it. For example, in 1938-39, a feature of the season was the behaviour of the Oomra contracts which remained very firm in comparison with Broach owing to the serious damage done to the crop by unwarranted rains and hail storms during October 1938. As the season opened the Broach-Oomra spread stood at about Rs. 18. It narrowed down to Rs. 14 at the end of the calendar year. On 25th March, 1939, it stood at Rs. 11 and on July 25th 1939 the Oomra was sold at a price only Rs. 3 lower than the Broach. Thus, it offered a good field for badla activity between the Broach and Oomra growths. Apart from India, badla business in the same way is carried on in the U.S.A., Canada, England, the Continent of Europe, etc.

Straddle or Badla Business Between any two overseas markets: Reverting to badla operations between overseas markets, it may be pointed out that the business is being done between (i) Bombay and Liverpool, (ii) Bombay and New York, (iii) Bombay and Alexandria, and so on. There is the risk of fluctuating exchange rates in all cases except between Bombay and Liverpool

in which case the Rupee is linked with the sterling. Hence, the Bombay-Liverpool badla is more popular in India. Since England went off the gold standard, and since the U.S.A. devalued the Dollar, complications are being experienced by straddlers. It is believed that since September, 1931, parities dance according to the whims of the exchange. In spite of this, badla business between any two foreign markets is going on to a great extent. Of course, it will be difficult to know under such conditions, what is a normal difference at a particular time. But to an operator, normal difference is usually the spread or difference most likely to develop. Thus, futures markets of the world afford an opportunity to this special class of traders who can intelligently enter into badla transactions to their advantage in all markets of the world.

Volume of Straddle or Badla Operations in the Indian markets: Since Badla business either within the country or with the foreign markets is in normal times regularly carried on all over the world, its volume is bound to be considerable. Various estimates have been made in this connection. Badla business in Bombay is roughly estimated at two or three lakhs of bales in each contract with each leading market like Liverpool or New York per annum. It should be stated that this figure only refers to the volume between foreign markets. No consideration is given to the amount of badla business within the country. Badla operations between Bombay and Karachi might amount to about a lakh of bales per year¹⁴. Similarly, account should be taken of the badlas put in with Ahmedabad, Indore, etc. Though exact estimates are impossible in view of the information received by us, the total figures can be roughly estimated at 8 to 10 lakhs of bales of badla business within the country.

5. UTILITY OF STRADDLE OR BADLA OPERATIONS

Prices in different markets tend to become such that an operator can buy in one market and immediately sell in the other at a profit. If the price differences widen or narrow appreciably without apparent changes in costs, a dealer would get an opportunity to do badla. Operators in the trade realise the essential unity of all markets of the world and they are quick to take advantage of any disparity between them.

Economic Functions: The important functions of badla business are (i) to keep the prices in different markets in line, (ii) to act as a connecting link between two prices, and (iii) to cement the spread between spot and futures prices. Taking the first function, it is the straddler who by his operations keeps the prices in different markets in level. Secondly, badla business tends to minimise as far as possible any price differences which are not normal

¹⁴ Personal investigation.

between the two contracts. Unusual pressure on one market or contract occasioned, perhaps, by the marketing of a crop may depress it below its normal relation to the other. The straddler is constantly watching for such price disparities and operates accordingly. Finally, when spot futures price relationship deviates, it is the badla business that tends to bring it back into line and hold it there. This continual alignment and realignment of prices reflect not only present prospects but future conditions as well. The character of badla may be of short and long terms. Badla transactions may be completed by actual delivery or by offset. But the economic functions of badla business lie in the just determination of differentials between localities, positions of a futures contract or two different contracts and in some cases, different kinds of products of an analogous nature.

Facilities for Badla or Straddle Business: To realise these functions straddlers are given various facilities. By far the greatest facility afforded to this kind of trading is the natural difference in the timings of different markets. On account of this difference in time, Liverpool opens at about 2-30 p.m. in Summer and 3-30 p.m. in Winter according to the Indian time. Opening of the New York market is late by 8 to 9 hours compared with India. Moreover, some special or extra facilities in the form of a special commission are granted to straddlers in most of the leading exchanges. This commission is known as 'a badla or straddle commission.' It amounts to one-half of what it costs to buy or sell outright two futures contracts. Further, a smaller amount of margin is required on badla transactions than on ordinary futures contracts. Thus, apart from the natural time differences a straddler is given every possible assistance by different exchanges.

Qualities Required of a Straddler: The badla business necessitates a constant touch with the foreign markets. The straddler must be a man of intelligence and expert in grasping market conditions. He should generally be alert regarding any developments affecting the relations between any two markets. Not only must the straddler be familiar with the usual factors affecting the price, but he must also have an up-to-date knowledge of shipping costs, storage expenses, physical conditions of deliverable supplies, fluctuating exchanges rates and so on. Besides, badla business demands experience and study. He must have a clear idea of proportions between any two contracts. If a straddler sells in one market a certain quantity he will have to buy proportionately in the other. For instance, the Indian proportion for badla operations is generally 500 bales in Bombay against 400 bales in either Liverpool or New York. He should be guided by the facts available, for, his success depends primarily upon knowledge of essential facts. There are certain firms in Bombay as in other markets which make a speciality of badla business and devote their full time to the work. There are some whose business is in another field

but they place an occasional badla transaction and are considerably handicapped by a lack of detailed knowledge of this kind of business. Thus, because of its highly technical nature, straddlers in India are comparatively few in number.

Uses of Badla or Straddle Operations: Since badla operations affect the movements in different markets or of different positions of contracts, farmers, spinners, shippers and merchants, take into consideration this element of price differences and operate accordingly. Such transactions have their justification in the protection they give to all these various interests. Farmers would like to sell in what they think to be a relatively high market. At the same time, spinners would like to put their order in what they consider to be a comparatively low market. Shippers who have cotton hedged in Bombay may transfer it to Liverpool when Bombay becomes high. The spot interests can move their hedges and get the result aimed at by entering into badlas. Commission agents can use this method to guarantee carrying charges from one delivery month to another. Others may enter into badla business in order to safeguard their positions. For instance, mill buyers may have bought May contract in October at Rs. 450 to cover an order for goods to be delivered at some distant date. Before they buy cotton to fill the orders they may find that May has gone up by about Rs. 25 while July has advanced by only Rs. 15/-. They may therefore sell their May and buy July and make a profit. Speculators also do a great deal of this business so that such transactions account for much of the badla operations on a futures market like Bombay. Thus, badla business can be put to a variety of uses by a number of trading interests. In certain cases deliveries are also ultimately resorted to, otherwise, when a purchase of one contract and a sale of another are made, both remain open, to be closed by a subsequent transaction. In many situations, badla operations cannot be completed by actual delivery, e.g. buying of the Middling in New York and the selling of the Jarilla in Bombay and therefore, generally, these operations are set-off before the arrival of the due date.

6. INFLUENCE OF BADLA OR STRADDLE BUSINESS

The object of these operations is to take advantage of temporary conditions which may cause two markets or two delivery positions in the same market to sell at wider or narrower differences than commercial conditions warrant. The obvious purpose therefore is to benefit by the comparative widening or narrowing of the difference in prices between purchase and sale.

Its Advantages: There are many advantages claimed by the supporters of the badla business: (i) Badla operations modify a tendency towards run away price movements in any specific delivery position. (ii) These operations serve the purpose of eliminating

undue fluctuations which may tend to put the market out of line with its commercial surroundings. (iii) They serve as a connecting link in the price level. (iv) They make a market broad, active and mobile for hedgers. (v) When intelligently employed, they aid in bringing prices into proper balance both with respect to time and position, i.e. they tend to bring back the two markets or two contracts into proper alignment. (vi) They tend to prevent the development of unhealthy situations like manipulations of prices, corners, squeezes, etc. and (vii) They make it possible to carry on marketing smoothly and economically.

Objections Against Badla Business in India: The usual criticism against badla business may be thus stated: (i) During the active hedging period in the U.S.A. prices tend to show weakness and some operators buy in New York and sell in Bombay where prices may even be lower on account of the double pressure of hedging and speculation. (ii) All badla operations result in artificial supply and demand because there may not be the least intention of taking or giving delivery. (iii) Badla business is unproductive, since, it neither helps in making nor in disposing of the crop, and (iv) Badla business has depressed the Bombay market.

Observations: Prices in the various world markets and in any given market for the several delivery months always bear a definite relationship which is primarily based on existing commercial conditions. Apart from the variations in differences caused by broader commercial developments operating over longer periods of time, there are numerous transitory fluctuations in prices caused by the appearance of sudden waves of buying or selling in one market or another. This in turn may have been caused by a number of local and general factors. But such a wave of buying appearing in one delivery position of a futures contract in a given market would tend to strengthen prices for that position relative to others and here a straddler steps in. Through his badla operations the effect of the heavy buying is spread throughout all the delivery months in the market. The tendency therefore would be to lift prices in that market relative to prices in other markets. Similarly, in the case of selling orders, the effect would be the reverse. Obviously, as a result of badla operations undertaken by those who are qualified by virtue of experience and information, the prices of different futures contracts either between two different markets or in the same market will be brought into line. These prices in turn are more likely to reflect common opinions as to the general conditions of supply and demand for cotton. The badla business is therefore a very important trading activity in the futures markets of the world. In fact, badla operations play an important and useful part in helping to maintain a well-balanced world market and prevent violent fluctuations in a given market.

Again, even in the absence of futures trading system in the world, badla business can be carried on. With the means of international communications now afforded all over the world, different markets when not hampered by extraneous conditions would tend always to seek the same price level. Undoubtedly, as a rule, commercial people will choose to buy in a market that appears relatively low for the time being and sell where the prices rule high. Similar will be the case with different positions of the same contract or two different growths in the same market in the same country or in different countries. This action on the part of a straddler tends to ensure that prices in markets which are in close communication shall differ only by an intrinsic difference in quality plus the cost of transport, etc., from one place to the other and shall remain in level.

CHAPTER XII

COTTON PRICES

IT is said that the knowledge of the trend of cotton prices is more important than any other single factor to a cotton man. This raises the question regarding the causes of high and low level of prices. The spot situation may be and often is an important factor for particular grades of cotton, but the general level of cotton prices is determined largely in a futures market which tries to adjust it probably a year ahead.¹ It should therefore be our object to analyse the movements of prices as registered in a futures market, e.g. the Bombay cotton futures market and ascertain how far they can be successfully forecasted in advance by the dealers in futures. For this purpose, we need to take into account the major and minor factors affecting prices in a given market and then to consider difficulties or points involved in such a forecast.

1. LONG TERM FACTORS AFFECTING COTTON PRICES

Taking first the long term factors affecting prices, it may be said that cotton futures are bought and sold in just the same way as any other article ordinarily traded in. Hence, the fundamental factors affecting the price of cotton futures are the same as those in the case of any other article, viz., (i) cost of production, (ii) general level of commodity prices, (iii) demand, and (iv) supply.

Cost of Production: The nearest approach to what is called cotton prices¹ is the cost of production. It includes the necessary costs for land, labour and capital and an additional payment for the efforts of the grower just sufficient to keep him from either increasing or reducing the size of the crop. The cost of producing cotton varies widely from field to field and from country to country, but there is a minimum figure below which a farmer cannot afford to work the less productive area. It should, however, be made clear that at any given time the price of cotton bears no relation whatever to the cost of growing it. Once the crop is produced it must be sold for whatever it brings regardless of the cost of production. This may be qualified by the possibility of withholding a portion of the supply from the market in years of lower prices and selling it in those of higher prices. The net effect of such a procedure is to iron out the extreme variations in prices and make

¹ "Since it is in the futures operation that uncapitulated needs are met and since by the mechanism of straddles, such needs are averaged out and communicated to the spot market, it may be said that the futures markets determine the prices"
U.S. Department of Agriculture Technical Bulletin No. 50, 1928, p.3.

them conform more closely to the production costs over shorter periods of time.² It is thus only over a long period of time that such a relationship is evident.

General Level of Commodity Prices: At what level this cost of production happens to fall is determined by the general level of prices of all commodities. The general level of prices is determined by the supply and demand situation along with the purchasing power of the monetary unit in terms of which the prices are expressed. In a trade which is so largely international in character, questions of the rate of exchange inevitably achieve greater significance and now that so many countries are off the gold standard, including every major cotton growing country these questions are gaining unusual importance. In connection with this factor there are three price movements worthy of note: (i) changes in the general level of prices of all commodities, (ii) the gradual change in the relation of cotton prices to those of other commodities, and (iii) short-term fluctuations. The general trend of price changes from one period to another is responsible for a large part of the change in the price of a particular commodity like cotton. The changing business conditions usually referred to as 'business cycles' also cause fluctuations in the price of cotton through their effect on the ability and disposition of buyers. Short-term fluctuations are more or less irregular. They originate in or turn upon a wide range of causes relating to demand and supply. It is thus a matter of common knowledge that with generally unchanged crop situation, the improving trade conditions lead to rising prices for a particular commodity and the declining conditions lead to falling prices, other things being equal.

Demand for Cotton: The demand for cotton is determined by two general factors: (i) the need of the people and (ii) purchasing power. There will be a demand for cotton so long as people need cotton and possess means to purchase it. Cotton falls in the list of what economists call 'necessities'. Its demand is therefore supposed to be fairly stable as well as relatively inelastic and every change in price should not be thought of as a change in demand.

Other factors affecting the demand for cotton are: (i) an increase in population with corresponding increase in needs for cotton, (ii) industrial developments along with new and extended uses for cotton; and (iii) changes in business conditions, in styles and in competition of other textile fibres. The influence of all these factors is reflected in changes over a period of time and is largely responsible for the general trend in cotton consumption. Again, the demand for cotton consists of two elements, viz., active demand

² Very often the producers of cotton make no adequate adjustments in the acreage for the following crop and another large supply comes on the market to add to an already inflated carry over. Under such conditions prices are often depressed to extremely low levels other things being equal.

and potential demand. The former refers to the activities in a spot market and the latter to the activities in a futures market. The actual demand for cotton is measured by the consumption in mills and by exports. However, the changes in mill consumption and in exports may not be accurately synchronised with changes in the market demand for raw cotton on the one hand or with changes in the demand by ultimate consumers of cotton goods on the other. Hence, such changes in movements may have very little relationship to purchases of raw cotton or to consumption by mills. The forces on the demand side in general exert their influence on the market through the channels both of consumption and of speculation. The immediate price reaction is the same in kind, regardless of the speculative purchase or the actual purchase for immediate or future deliveries.

Supply of Cotton: It is customary to say that the price of an article is determined by its 'supply and demand'. Being interdependent, one cannot say that either the demand or supply is the more important factor in determining the price. It can, however, be ascertained which, in a given situation, is more influential in causing prices to change. Since the demand for cotton is fairly constant and comparatively inelastic, changes in supply are rather important accounting for major price variations. The chief characteristics of cotton supply are: (i) The additions to supply occur but once a year. (ii) Supply is subject to vagaries of weather such as, drought, excessive moisture, storms, frost, floods, etc. (iii) The plant is subject to disease such as rust, weevil and an endless as well as ever-changing list of other forms of pestilence. (iv) Supply is widely distributed all over the world in as much as millions of farmers of different countries produce cotton, and (v) Several months elapse from the time of planting to the time of harvest. For all these reasons there remains an uncertainty of what the season's crop will be.

The supply of cotton usually consists of two elements, (i) visible and (ii) invisible. A visible or actual supply may be fairly accounted for. An invisible or potential supply is far more difficult to estimate. It continually injects uncertainty in estimating the total supply. The visible supply takes into account figures of cotton in transit and afloat, at terminal points, in store, and in the hands of mills. The figures of invisible supply cannot be accurately availed of, because, they consist of those portions of cotton which may be in the hands of farmers and upcountry dealers. Moreover, figures of new crop are nothing but estimates though they serve as an important index of future supplies. The supply thus includes four items: (i) Carry-over, (ii) production of the current year, (iii) prospective crop of the growing season, and (iv) stocks of manufactured goods. Over a long period of time, availability and volume of substitutional materials should be taken into account.

Each of these items varies in importance from one season of the year to another. For instance, in India the size of the total current crop becomes fairly certain by April and this plus the carry-over makes up the supply of the Indian cotton for the season. The next crop is also a factor on the supply side. But its influence on the price of spot cotton at this time is negligible. During this period the price is therefore largely a result of adjustment of a known supply to the strength of demand. This adjustment is usually made before the close of the period. It can also be made earlier by the trade. The statistics of value in this period are those showing: (a) April estimates of production for our cotton, (b) the carry-over, (c) business conditions, (d) mill takings, (e) mill consumption, (f) stocks of piece goods, (g) activities in the piece-goods market, and (h) shipments of cotton and cotton piecegoods.

Then comes the pitching of the new crop and adds an uncertainty to the supply side which has an influence on the price of the old as well as the new crop. During this part of the year the market is particularly responsive to all influences affecting the growing crop both in India and the U.S.A. By this time, the disposal of the old crop has become fairly certain. The U.S.A. Reports of acreage and crop conditions and the 'Cotton forecast' issued by the Department of Commercial Intelligence and Statistics, India; constitute one of the most important factors affecting price. Among the day-to-day influences nothing equals weather reports in importance. The figures of peculiar significance at this time are, the prospective yield, the ginnings, the movement of the crop both into interior towns and exports, weather conditions affecting both, production and quality of the crop and mill takings. Changes in the supply situation brought about by changes in estimates of the present and prospective size of the crop in the U.S.A., India and in other countries result in considerable price movements. The year 1937-38 is the case in point. A substantial proportion of the drastic decline in cotton prices early in the season 1937-38 was accounted for by increases in the estimated size of the United States crop for 1937-38 which turned out to be 18,946,000 bales, a record for all time. This bumper crop had a most depressing effect on raw cotton prices all over the world. Thus, in any given year, the supply of cotton already produced or in prospect together with the various conditions of demand, both actual and potential, tend largely to determine the price of cotton futures. The change in price due to changes either in supply or demand is essentially an annual movement. Hence, these principal forces may be regarded as long-term factors causing the major movements or long-time fluctuations as opposed to short-term or minor variations in cotton prices.

2. SHORT TERM FACTORS AFFECTING COTTON PRICES

Short term or minor variations are the results of a fairly large

number of causes relating to one of the two main factors of supply and demand. Occurrences of these variations may be of a few months' or a few days' duration. This may even be of a few moments' duration. Thus, the period covered by one of these movements as well as its intensity vary from time to time. Short-time variations grow out of the fact that the crop is harvested only once but consumed throughout the year. There should be someone to carry forward the supplies from the time of harvest to that of actual demand. It requires organisation and expenditure in the form of storage, equipments, insurance, handling charges, etc. At any particular time, these variations in price may depart far from the costs of carrying cotton from one period to another.

Market Operations: The price in a futures market at any time reflects the trade opinion which is expressed through the character of purchases and sales made. The quantity of futures available for trading is an indefinite amount. Futures can be multiplied to any amount by the operators through the facilities afforded on the market. The trading becomes simply a matter of setting up agreements in which one side assumes a long position and the other a short one. Some of these contracts are closed even five minutes after they are made. There being practically no physical limitation to the rapidity with which transactions are made, trading in a futures market ostensibly depends upon the financial strength and nerve of operators. This fact has an important bearing upon the possible influence which futures operations exercise upon prices. If by circumstances, one side has the support of strong financial interests and the other has not, it is likely that prices will move temporarily in favour of the former. Those on the weaker side may have ample evidence to support their views but prices will not move in their favour unless and until an additional support or opposition is encountered. So long as the enthusiasm for higher prices is rising, prices are likely to advance. When the general enthusiasm wanes or financial support on the buying side becomes inadequate, a radical readjustment is sure to follow. A decline may be the result of either profit taking on the part of long speculators, a movement of bear speculators selling for a decline, lack of interest on the part of mills and exporters or the pressure of hedging operations. If there is a rise, it may be due either to a movement of the bears to cover previous sales, a speculative bull movement, increased activity on the part of mill buyers or the lack of offering spot hedges in the market.

Again prices are affected both by the manner of trading and the amount of transactions put in. In general, a temporary advance or decline in price may be the result of traders increasing their long positions or covering their short position in the market. But how far this is true is open to doubt. Some believe that large-scale

trading tends to cause price movements in our market.³ Others question it and express that perhaps price movements cause large-scale trading. The fact lies half way between the two views. It appears that the Bombay market moves through the force of a third factor which affects both, the price and large-scale trading. This third factor seems to be the influence of the daily news. It is probable that these day-to-day movements in price are a product of both large-scale trading as such and the important news of the day reflected through the trading of the market as a whole. If the principal news items on our market, for a certain day are examined it will account for the day's upward or downward trend of the market. It is possible that one or more leading speculators would trade that day either in response to the movement in price or in anticipation of it. Many a time, however, the news of the day does not supply an adequate explanation of the course of prices. On such days, market operations grow in relative importance as a cause of price variations.

Market News: If traders are in a position to sort out items of fundamental importance from the enormous mass of material circulated and to make timely decisions, prices will reflect basic market conditions. Otherwise the prices may move a long way out of line before corrective forces crop up. All shades of news are thrown together to be individually weighed by traders and then reflected in price through their composite judgment. In this process, the elements of time and opinion are all important. As for example, all traders in India do not receive all the items of information at the same time. Some rely on trade journals and periodical reports, some on telegraphic reports and newspapers and some on sources such as gossip, rumours, tips, and astrological findings. In order to receive in time important information a trader has to undergo a lot of trouble and expense. The degree of individual judgment depends upon the efforts of the trader in this direction. It therefore varies widely between the trading interests. As a result, the market becomes a many-sided affair fluctuating continuously in response to changing opinions. Moreover, on a futures market, ill-founded news play their part in affecting the price. If the information is lacking in accuracy, the item of news becomes a price factor. At times, it forms the basis of trading activity. Both harmful and helpful news are frequently circulated. To what degree a particular piece of information is inaccurate or misleading is difficult to ascertain, but it should be admitted that it has some influence on the market particularly in periods of high and uncertain prices. Further, the price is frequently pulled out of line from its normal course by false information of various kinds, such as, private estimates of cotton production, rumours concerning prospective demand, etc.

³ Personal talks.

Public Participation: A factor frequently mentioned in connection with prices on an organised market is that of public participation. The word 'public' usually refers to individuals having three characteristics, viz., (1) occasional trading, (2) trading with small or moderate limits, and (3) bullish attitude, i.e. trading in the hope that prices will rise. This body of traders comes into prominence during periods of rapidly rising prices. Each added advance attracts new traders to the market. At times when prices are carried to extremes, new capital is not forthcoming in sufficient quantities to maintain confidence, and those already in the market have spread their capital over too wide an area. A reaction in price is all that remains to complete the cycle and liquidation with a complete collapse follows. Its influence is to drive prices too high during the boom and then to abnormally depress to a low level. However, it is not always the case that the public in general act in this manner but those liable to sudden and extreme excitement do so. Contrary to the general belief that the public buys as prices advance and is forced to sell in declining market conditions, it may and does happen that when prices advance, the public becomes sellers rather than buyers and vice versa.⁴ A possible explanation for this is that in temporary advances, selling by public occurs with the view that the position will shortly be reinstated at better figures, and when prices decline purchases are made by the public in the belief that the break has run its course. For this reason, it may be noted that the public participation becomes a factor influencing the short-term movements of cotton prices only in periods of market excitement, and it cannot be regarded as a factor calculated to influence the price under ordinary circumstances.

Hedging: It is generally believed that hedging operations affect prices particularly during the marketing period. Hedges in the form, of future sales reach large proportions during the season when the crop moves and vary considerably between the various hedging interests. For instance, when cotton is in the field and about to mature there comes what is called 'hedge pressure' in the market. Later on, when actual cotton is sold these hedges are simultaneously lifted. Hence, if prices tend to be depressed at the time of hedge sales, they will tend to go up when the hedge purchases are made. To what extent hedging is itself a price factor is therefore difficult to determine. At times, it is certain that the influence of hedging is felt and the term 'hedge pressure' serves as a guise for the real cause of price movements.

Badla Operations: Badla operations of hedgers and speculators are considered a further factor influencing the price. The theory upon which straddlers operate is that when prices between the two markets, between the two months or between the spot and futures contracts get out of line, they buy what is relatively low in price

⁴ Personal observation.

and sell what is comparatively high. The general effect of this operation should be to bring the two prices back to their normal alignment. But at times, badla operations may tend to cause high prices to go still higher and low prices to go still lower and thus become a factor unduly influencing the course of prices.

Other Factors:

(a) **Technical Conditions:** A futures market is subject to many technical trading conditions affecting the price at which transactions are made. Apparent trade activities can be created by means of 'Wash sales', 'Matched orders', 'Squeezes', 'Corners' and various other forms of tampering with the market. Another type of transactions calculated to have some effect on price refers to what are known as 'accommodation or crossed orders'. In India it frequently happens that transactions are made privately. For instance, a commission house in Bombay receives orders from different customers. The convenient way adopted by the house in the disposal of these orders is that the transactions of buyers and sellers for the same amount, price and futures are accommodated or crossed without reference to the ring. This may tend to prevent the market from registering price influences.

(b) **Option or Teji-mandi transactions:** In those markets in which teji-mandi or option business is permitted, the prices are at times influenced by such operations, at least for the time being. This happens on account of the fact that when the options mature, there will either be a large demand or a big supply of a particular futures contract and its price is bound to be affected to that extent.⁵

(c) **General Economic Situation:** Another factor that affects the price of cotton is the general economic and business conditions. The most widely accepted principle in connection with the price is perhaps the doctrine that changes in the stock market lead to similar changes in the volume and direction of business activity. As a matter of fact, it is usual in the cotton trade to regard the movements of the stock market as an index of coming events in other markets.

(d) **Political Developments:** It is a matter of common knowledge that the political developments both national and international affect the price for the time being more often than any single factor. For instance, in recent years, the rearmament programme all the world over appears to have been the factor of considerable importance in causing the price movements. In the same way, rumours of conflict between nations, or military pacts and other similar items of information influence prices on a futures market.

(e) **State Control:** The availability of supply as well as the

⁵ Refer to Chapter on 'Teji-mandi or Option' business.

total quantity in existence affect prices over relatively short periods. With a given total physical supply in existence, the quantity immediately available in the market at specified prices may be reduced by the State price-pegging policy or by other forms of organised control with the result that prices may be strengthened temporarily. For instance, in America the restriction of output in 1933 caused an upward movement of cotton prices in 1934. Similarly due to the Government activities the prices of American cotton were maintained at a relatively high level for the greater part of the year 1935. In this connection, instances may be cited of the activities of the Farm Board and the Cotton Stabilisation Corporation. The passing of the Bankhead Cotton Control Act in 1934 and the Soil Conservation Act of the U.S.A. point to the same direction. Without entering into details it may be mentioned that the price of American Cotton was strengthened by loans to the farmers till 1938 and at one time the U.S.A. Government had on its hand 11 million bales of cotton. In 1939, while thus buttressing the internal price of cotton the U.S.A. Government subsidised exports of cotton to the tune of 2 cents a lb. Similar arrangements have been made by the Egyptian Government to uphold the price of Egyptian cotton. Fixing of 'floor' and 'ceiling' prices in India also tends to achieve the same results.

(f) **Spot Transactions:** Last but not the least important factor affecting the price of cotton futures is the influence of spot transactions. The fact that a futures contract can be converted into a spot transaction on the date of its maturity accounts for this. The general changes in prices of spot cotton are usually associated with more or less similar changes in prices of futures, not so much because one is determined by the other, but because they are both determined largely by the aggregate of the present and future conditions of supply and demand. For instance, a rise in the price of spot cotton may mean that there is a shortage of present or anticipated supply in the near future. Conversely, a rise in the futures prices may denote the view of the dealers that the total available supply is insufficient for the season should the present rate of consumption continue. Thus, the price of cotton futures on the surface represents a point of equilibrium between the bids and offers of those actively engaged in the marketing of cotton.

So far as the short-term factors are concerned it may be concluded that the short term variations in the price of cotton are the products not of one, but of a variety of causes. Generally speaking, these short-term factors are not the fundamental forces determining the price in the long run, but they are certainly factors determining the precise points for the purchase or sale of cotton for a given day, week or month. For this reason, they are of greater concern and more important to an operator in futures than any other single group of factors affecting the price of cotton.

3. WAR-TIME FACTORS AFFECTING COTTON PRICES.

The declaration of war in September 1939 influenced every sphere of our economic activity, some being directly affected and some indirectly. Those commodities which were used as sinews of war were subject to direct influence. Prices of raw materials particularly of those in which futures trading was carried on took an upward trend after the outbreak of hostilities. The trend of cotton prices in 1939 and 1940 was mainly dominated by the course of the war. The unexpected and fearful turns in the war situation during these years brought many surprising developments in the price of futures. While at one time the war brought an upward swing in prices at another time it accounted for a devastating decline. Cotton and jute are the cases in point. For instance, the price of cotton futures rose from an ordinary pre-war level of Rs. 160 to Rs. 341. In course of time, however, the price again dropped to Rs. 147-8. In view of this, it is interesting to discuss the prices of cotton futures markets in India during the war-time.

Immediate Effects of war on the price of cotton Futures: The initial effect of the war on the cotton Exchanges of those countries which were not directly involved in the conflagration and which were neutral, was a sharp rise in prices. The advance in prices continued for some months but a reversal of the trend set in shortly after the new year of the war. The stock exchanges collapsed in May 1940 when the German invasion of the low countries created panic among investors and speculators. Cotton exchanges followed suit in June or July. Then there followed a long period of inactivity, speculators preferring to wait for the war situation to become more clear.

The cotton year 1938-39 opened with Broach at about Rs. 160 and it practically closed on 25th August 1939 at the same level. The fluctuations in prices though varied were of a limited character. The sudden outbreak of war in Europe changed the entire outlook. The crisis was the least expected and it was believed that like the Munich Pact, some pact would be formulated and even at the eleventh hour war would be averted. The Bombay market was therefore staggered at the first impact of war and a frenzied speculative activity was in evidence. The rise in raw cotton prices soon after the outbreak of the war was therefore most pronounced. Within a fortnight the Broach quotation jumped up from a level of Rs. 158 to Rs. 220. For instance, the Broach April/May futures contract which stood at Rs. 158-8 on September 1, 1939 shot up to Rs. 224-8 on September 15. Thus the first impact of war was to send prices abnormally high. The following table brings this out in a clearer manner:—

**Table Showing immediate effects of war on cotton prices.
Broach April/May quotations in Rs.**

1939-40 Year	Opening at 11-30	After-noon at 3		Night closing at 8-30
	Ra. as.	Ra.	as.	Ra. as.
7th Aug.	153 4	154	8	155 0
14th Aug.	156 2	156	12	154 12
21st Aug.	151 12	152	0	..
28th Aug.	160 4	160	.8	159 12
2nd Sept.	162 0	188	0	166 10
9th Sept.	187 8	186	0	183 0
16th Sept.	206 0	211	0	222 0
23rd Sept.	208 0	207	8	202 8
30th Sept.	198 0	194	0	192 8

If we compare the range of fluctuations during the months of August and September (the month immediately preceding the declaration of war and the month immediately following the outbreak of conflict) we find that price fluctuations were most normal during August ranging from Rs. 152 to 160 while the same became equally abnormal during September ranging from Rs. 162 to 222. Even if we take the range of fluctuations for a given day, say, 14th August and 16th September it is evident that on the 14th August prices varied from Rs. 156-12 to Rs. 154-12, i.e. a variation of Rs. 2 per day, whereas on the 16th September the movements were violent varying from Rs. 206 to 222, i.e. a variation of Rs. 16 per day. A further observation that may be made from the above table is that prices were ruling at Rs. 160 or so till the end of August, while after a fortnight they jumped up to Rs. 222 registering thereby a rise of Rs. 66 or 39%. This contrasts favourably with the variation of Rs. 26-12 throughout the year 1938-39. The explanation for this phenomenal rise in prices is not far to seek. The war in Europe was chiefly responsible for it. The moment the conflagration was ablaze, there was a temporary collapse in the dollar value of the English and Indian currencies. The £ receded from 4.32 dollars on August 31 to 3.83½ dollars in September 18, 1939. This gave a fillip to the bullish activity in the cotton market and prices began to rally fast along with other commodities. Among other factors the following were mainly responsible for this steep rise: (a) the smaller carry-over from the 1938-39 season, (b) the smaller crop for 1939-40 than the previous season, (c) the technical situation of the market, e.g. there was heavy short position in the market either against spot cotton or badla business; and (d) teji-mandi transactions. As a result of the combination of all these factors as well as the impetus given by the war the market moved up from height to height establishing new levels at every interval. Moreover, at every new level the badla and teji-mandi transactions had to be reversed which in turn sent prices still higher.

Effects of World War I and II Compared: When the first World-war broke out prices began to decline and it was not until the war was well along in its second year that prices returned to normal. The experience of the war of 1914 created an impression that prices would collapse in the beginning owing to war scares and uncertainties. This impression was fostered and translated into action. But when the second World-war broke out the position was quite the reverse. This can be seen from the following table:—

Table Showing average monthly prices of Broach futures in Rs.

Months.	1914-15 ⁶	1939-40 ⁷
	Rs. as.	Rs. a.
June	289 8	158 10
July	281 0	152 6
Aug.	227 8	146 14
Sept.	212 0	195 6
Oct.	185 8	195 14
Nov.	180 8	229 10
Dec.	175 0	305 2
Jan.	187 0	299 14
Feb.	199 8	265 14
March	224 8	258 4
April	267 0	242 6
May	246 0	229 0
June	240 8	175 6
July	238 8	166 4
Aug	248 0	178 4

The explanation that can be offered for this state of affairs is that heavy commitments by way of monthly and annual teji-mandi contracts found the market this time exceptionally short. Hence, the market was rendered uncontrollable and prices began to rise by leaps and bounds. In addition, Bombay was feverishly excited on the steep rise in the Liverpool market and the fall in sterling. This put our market out of all relations with others. A reaction as a necessary corrective came in October 1939 when prices declined by about Rs. 40. This drop in prices was due mainly to peace rumours from Europe. These rumours did not take any shape and with the advancement of war the prices began once again to rise,

6 Based on data supplied by Messrs. D. K. Nani.

7 Based on data supplied by Messrs. C. B. Mehta and Co.

8

	Bombay-Broach expected to open Rs. per candy.	Liverpool American expected to open d. per lb.	Wed night New York closing received in Bombay on Thurs. morning cents per lb.
Sept. 7	190 8	5.73 May	8.57 May
Sept. 21	210 0	5.71 May	8.42 May

touching Rs. 206 on October 14. On speculative buying by Bombay and Calcutta dealers the prices rose to Rs. 289-8 on November 30 and to Rs. 305 on December 2. Bombay saw this new high level of Rs. 300 after a lapse of some years. But the market being unsteady this level was not maintained for a long time. Following the weakness in the jute and other markets Broach dropped to Rs. 267 on December 7. The downward trend was however arrested by better advices from Liverpool and New York which sent up prices to Rs. 338-8 on December 18. The season's peak price of Rs. 341 was reached in the Bombay market on January 5, 1940. At this stage after a short pause, prices terminated with a downward move. A bearish tendency developed because of (a) arrivals from upcountry, (b) accumulation of stocks and (c) the Excess Profit Tax Bill. It created a slump in the market and the price of Broach declined to Rs. 248-8 on January 30. The threat of labour trouble in the textile industry on the question of dearness allowance also caused some anxiety. A further setback in price was registered in March. But it was not until the month of May that the feeling of nervousness was brought about in the trade. The market was shocked by the news of the invasion of Holland, Belgium and Luxemburg and the possibility of some more markets being lost to Indian cotton. Besides, the closing of the Mediterranean to cargo ships increased the difficulties of export trade with the U.K. and the Continent of Europe. The depreciation of the Shanghai Dollar, scarcity of freight space and the difficulty of obtaining exchange permits from Japan further aggravated the situation. The total effect of this was the heavy accumulation of stocks in Bombay and Karachi which pulled down the price of Broach from Rs. 263-12 on May 1 to Rs. 181 on May 22 and to Rs. 168 on June 6. The news that negotiations in respect of the Indo-Japanese Trade Agreement were indefinitely postponed also proved depressing to cotton prices. This accompanied by the lack of war risk insurance facilities heightened the burden of hedges. Italy's entry into the war on the side of Germany, the breakdown of French resistance and the aggressive activities of Japan in the Far East contributed to bring about such a demoralisation in the Bombay market that the Broach quotation came down to Rs. 147-8 on July 2, 1940. This was the lowest point touched during the 1939-40 season. As a result the entire war gain in prices was wiped out.

From this point prices took an upward trend. Demand in the spot market developed which helped to keep prices firm. Later on, the Government of India announced a compulsory scheme of war risk insurance. This coupled with better spot demand produced a bullish effect on the market and the prices on 31st August 1940 touched Rs. 190-8. On September 2, 1940 Broach was quoted at Rs. 192. During the four months—September to December 1940—the range of price fluctuations was comparatively normal varying from Rs. 213-12 to Rs. 181-8. As the crop began to

move the pressure of hedge sales was witnessed in the market and the Broach fell to Rs. 175-8 on January 22, 1941. This was the lowest price of the 1940-41 season. During February and March the tone became firm. Indian mills were the chief supporters in view of the fairly large war orders that they were receiving. Japanese houses also availed of this level. Moreover, the outlook was brightened in sympathy with the prices of American cotton which were improving because of the record domestic consumption and the passage of the lease-and-lend legislation in the U.S.A. In view of all these factors, prices jumped up to Rs. 200 on March 14 and touched Rs. 249 on March 24. It was at this time that a squeeze was hinted at and a heavy rush of all-round buying was noted. In consequence, the price of Broach, after a slight retreat, soared high and stood at Rs. 323 on May 15, 1941. An interesting feature of the season was the fact that the July/August 1941 contract which was quoted at a premium of Rs. 5-8 over the April/May 1941 contract in the beginning was now being quoted at a discount of Rs. 73-12.

Measures taken by the Authorities: To meet this extraordinary situation various measures were adopted by the E.I.C.A., viz., (a) timely warning was given by the President against over-trading, (b) restrictions were put on forward sales of July/August and July contracts by a member without a sufficient cover, (c) statements of outstanding business were called for, (d) the hours of trading on working days except half holidays were fixed from 12 noon to 5-30 p.m. with effect from May 15, 1940, and (e) all teji-mandi transactions except the annual options were prohibited. In the middle of the season 1940-41 it was apprehended that a corner in the Broach April/May contract was being engineered by some of the traders and at least a squeeze was within the vicinity of a shrewd dealer. The Board of the E.I.C.A. realised the gravity of the situation. Consequently, with a view to bring about the ease in the market they adopted the following measures: (a) a notice was issued drawing the attention of the trade to the clause giving powers to the Board to deal with 'corners' or 'bear raids' in any and every kind of cotton, (b) trading in new crop was opened earlier than May, (c) the fixing of the daily rates was undertaken by the Board, (d) the trade was given a warning not to accentuate the July/Aug. position any further, and (e) the prices of Broach April/May and July/August 1941 contracts were fixed by the Board on the due dates at Rs. 297 and Rs. 230 respectively.

In July 1941, prices came down owing to the following factors: (i) import control imposed by the Government of India, (ii) a circular issued by the Reserve Bank of India withdrawing the availability of U.S. Dollars for the payment of differences owed on futures business in the New York market; (iii) an order freezing Japanese and Japan-controlled assets in India. As a result, the

selling pressure developed in the market and the July/August 1941 contract was finally settled on August 25, 1941 on the basis of Rs. 230 'as fixed by the Board.' Towards the end of 1941, the declaration of war by Japan on the Allies aggravated our export situations still further by reducing the figure to almost nil. Hence, there was a surplus of about 20 lakhs of bales mostly of short staple cotton. In view of this, the I.C.C.C. and the E.I.C.A. suggested some measures to meet these circumstances. The most important suggestions were: (1) that the acreage under cotton should be reduced by 50%. (2) that food-stuffs should be substituted for cotton, (3) that the long-staple varieties should be replaced wherever the short-staple cotton was grown, (4) that the Government of India should come to the rescue of the cotton grower by purchasing the short-staple cotton, and (5) that a new hedge contract should be framed to solve the problem of the disposal of the short-staple cotton in a general way. All these measures and suggestions, it should be noted, had been successful in realising the desired effects to a certain extent which helped the market to settle down under the then prevailing conditions to what may be regarded as 'normal'.

Ban on Futures Trading in Cotton: Political news played a big part in the movement of the cotton prices throughout the year 1942-43. The opening prices were Rs. 281. The lowest prices of the year were touched on the 18th April 1942 when Broach was quoted at Rs. 141, Oomra at Rs. 131 and Bengal at Rs. 123. From May 1942 onwards, dearth was felt in the medium and long-staple growths. The premia of these varieties began to rise. This was reflected in the 4F contract in Karachi which at one time went up to a record premium of Rs. 90 over the Broach in Bombay. The reason for this is not far to seek. The increasing domestic consumption⁹ of Indian cotton from an annual average of about 3 million bales to more than 4 million bales during the year 1942-43 should be regarded as a notable factor. Recognising this the newly introduced¹⁰ "Jarilla" contract opened at Rs. 355 on the 15th July 1942 and went up to Rs. 380, i.e. a premium of Rs. 150 or so over the Broach. By the end of July 1942, the Indian political situation began to deteriorate. The new contract in consequence dropped to Rs. 301 in the beginning of August. In response to the August resolution of the Indian National Congress the cotton futures market ceased functioning for a couple of months. Since the resumption of normal activities in the market, price fluctuations in the Indian Cotton Contract became interesting. During December 1942 the prices oscillated between Rs. 380 and 440. This may be accounted for by the air raids on Bengal and the weak technical position then prevailing in the cotton

⁹ Table showing the mill consumption of Indian cotton—

Year	1938	1939	1940	1941	1942	1943
Consumption (000)	3304	2853	2926	4209	4166	4450

¹⁰ Reference to chapter on "The Hedge Contract System for Indian Cotton."

market. From the beginning of the new year, the cotton price hazards knew no bounds but the general tone showed a really healthy sign on account of the new staple contract. Since the termination of Mahatmaji's fast on 2nd March 1943, restless price movements began to characterise futures trading in the Bombay market. Inflationary sentiment accounted for quite a lot of the rise. Again, in absence of straddling between the Indian and foreign markets, one of the most effective corrective did not operate. No sooner did the Jarilla May position touch Rs. 647 by the middle of March 1943, than came the Finance Member's sharp warning to speculators. As a result, prices at once sagged back to Rs. 555. But it should be pointed out that the upward trend had more than sufficient warrant on the following basically sound factors: (1) 20-22% reduction forecast in acreage over previous year, (2) the strong statistical position of stapled varieties covered by the hedge contracts in Bombay and Karachi, (3) the steady demand by Indian consumers, demand from the U.K., etc., (4) the upward trend of premium for staple varieties in the spot market, e.g., the 289F which was Rs. 6 'on' at the beginning of the season rose to Rs. 18 'on' later on, and (5) in spite of a heavy drop in futures prices, prices of cotton for ready delivery remained practically untouched after the Finance Member's speech and even in the case of some staple varieties they appreciated to a considerable extent.

A warning issued by the Government of India on the 1st April 1943, which was regarded as a mere threat to the speculator culminated in the prohibition of futures trading in cotton. It took the shape of an Ordinance imposing a ban on "Options and Forward Contracts" in the new crop since the first May 1943.¹¹ As the order included even forward delivery transactions, the impression it tended to create in well-informed quarters was that the Government had a confused conception about the trading on a futures market.¹² A necessity of exempting the *bona fide* spot transactions in forward delivery contracts was explained to the Government by various influential sections of the trade. The Government realising the error at once corrected it by excluding from the Ordinance such transactions for the new crop. This was construed by a large number of traders as a preliminary step to relaxation of control in cotton dealings. Some of them thought and others believed that the Government did not intend to be so strict about the ban as it would appear at the first sight. In pursuance of their views about control, most of the speculators acted in a manner which had the effect of frustrating the very purpose of the Government order. Speculation became quite hectic and prices soared to new heights. In the middle of May, the quotation

11 The Cotton Options (Forward Contracts and Prohibition) Order, 1943. Issued on 30th April 1943.

12 of "That Delhi does not know the difference between the various kinds of cotton contracts is the main conclusion," Editorial "The Times of India" = 8-4-43.

for the July position of the Jarilla contract was sent up to Rs. 674. This established an all time record for the last decade or more. But its reaction in the official circles was great. On the 18th May the Central Government issued a fresh communique making the ban applicable to futures trading even in the current crop.¹³ Only 48 hours were given for the voluntary liquidation of all transactions before the 20th May 1943. On the following day prices for settlement purposes were fixed by the Government at Rs. 565 for the May position and at Rs. 568/- for the July position of the I.C.C.¹⁴ Thus the working of the cotton futures market in India was suspended from the middle of the year 1943. It was however the future rather than the past which created misapprehension in the Government quarters. It must therefore be pointed out in the fairness of things that the official intervention was not only premature and unnecessary but also derogatory to the dignified trade of the country. It may be mentioned in passing that stabilisation devices, price regulations and other contrivances, well-intended but often weakened by the palliative element and the inherent detrimental political opportunism, have been tried in other countries only to end in disappointment. In fact, to think of stopping trading in futures should amount to the economic sabotaging of the organisation of the cotton trade and industry in India.

Resumption of Futures Trading in Cotton: Under the Defence of India Rules, the futures market for Indian cotton remained closed for about five months from the third week of May to the last week of October 1943. During this interval a number of interested bodies tried to bring home to the Government of India the necessity of resuming the normal working of the market. Of all these institutions the part played and influence exercised by the E.I.C.A., the I.C.C.C. and the Cotton Committee of the Textile Control Board were of considerable importance. The central authorities ultimately felt the weight of public opinion and gave way by relaxing their grip over the market, and on Thursday the 28th October 1943, the auspicious day of the Divali festival 'muharat' 'audas or transactions in the cotton futures were freely made under the aegis of the E.I.C.A. The Indian cotton market is since then functioning on one hand in compliance with the requirements of the various interests connected with the Agriculture, Trade and Industry and on the other, within the terms and conditions prescribed by the Government authorities. The important safeguards with which futures trading in cotton was then permitted in Bombay were¹⁵ (1) that a floor at Rs 400 below which prices should not be allowed to sink be erected and maintained, (2) that a ceiling

¹³ The Cotton (Forward Contracts in Current Crop Prohibition) Order, 1943 Issued on 18th May 1943

¹⁴ The following rates were fixed for Karachi—Rs 58.16 for May 41 and Rs 59.16 for July 41. The Government Communique dated 21st May 1943

¹⁵ Government Press Note, New Delhi 27th October 1943

at Rs. 550 above which prices should not be allowed to rise be raised and kept, (3) that a policy of acquiring at floor rate and requisitioning at the ceiling prices, if need be, should be carried out, and (4) that a deposit of Rs. 25 per bale on the net open position be demanded. The ceilings and floor prices for the seasons 1945-46 and 1946-47 were prescribed¹⁶ as Rs. 530 and Rs. 350 per candy respectively for the I.C.C. in Bombay and Rs. 55-8 and Rs. 37 per maund respectively for the 4F contract in Karachi. The following were the additional terms and conditions laid down by the Government of India for trading in futures contracts in Bombay and Karachi:—(i) Trading shall be permitted only in the official markets of the E.I.C.A. in Bombay and the K.C.A. in Karachi who should obtain a prior consent of the Governments of Bombay and Sind respectively. Such trading in any other market shall be a penal offence. (ii) Trading in options shall continue to be prohibited and shall remain a penal offence. (iii) Every member of the Association concerned shall deposit with the Association a sum which shall not be less than Rs. 12½ per bale on the net open position of each member regardless of price levels. (iv) The Associations concerned shall enforce rigidly their various bye-laws. (v) The Associations retain their power to call upon any member at any time to submit a statement showing his open position and the accounts. (vi) When prices are at the floor rates for any or all of the descriptions the Government of India undertakes to buy such cotton in Bombay and elsewhere. (vii) At the ceiling prices, the Government reserve the right to requisition cotton of the descriptions listed, grade and staple as named, whether for the use of mills or otherwise. (viii) Staple standards shall be prepared by the E.I.C.A. and the Textile Commissioner shall have the right of appeal against such standards.

In the Press Note issued by the Government of India on 1st September 1947 the ceilings and floors prices for the season 1947-48 were fixed at Rs. 530 and Rs. 430 for the I.C.C. respectively with effect from 1st September 1947. Other terms and conditions laid down were as above. In permitting the continuance of futures trading in cotton the Government have off and on emphasized that this action is designed to meet the special circumstances of the cotton market and that safeguards will be rigorously enforced in the interests of price stability. Any student of the organised markets will tell us that there is nothing new or surprising in these provisions for allowing trading in cotton futures. In fact, all these and many others are prevailing in sister markets abroad. Hence, they were long overdue for our country.

From the above brief review of the war-time factors affecting cotton prices the principal points that may be observed here are: (i) that the immediate effect of war of 1939 was a sudden rise in prices, (ii) that during the Second World War the prices went

¹⁶ Government Press Note, New Delhi 24th August 1946.

up with the outbreak of hostilities and a climax was reached in January 1940 while during the war of 1914 prices in the beginning and for some time during the year went down, (iii) that it was undoubtedly a trying time for the cotton trade and market in India, though the cotton futures market in India has stood up to its many embarrassments in a most befitting and noteworthy manner, and (iv) that prices during the war are governed more by political and other factors than by pure economic considerations or the demand-and-supply situation in a given market like the F.I.C.A. in Bombay at a given time.

4. ANALYSIS OF FORECASTING COTTON PRICES

A cotton man usually concerns himself not only with the price that will result from given circumstances of supply and demand, but also the probable limits within which fluctuations will be confined, because, if these predictions are correct, he turns out to be a successful operator in futures. The problem of estimating the probable price is not an easy task, since, it resolves itself into making an estimate of what the world supply and demand will be.

Factors to be taken into account while forecasting: Factors which influence the price of raw cotton in the world's markets and require to be accounted for while forecasting are as follows: (i) Causes bound up solely with the supply and demand for cotton, either spot or futures at any given time and (ii) Financial causes. Under the first, one has to take into account the statistical factors relating solely to raw cotton which include (A) Annual Statistics and (B) Current Statistics. Annual Statistics include (a) the world's carry-over from the previous year at the close of the season, (b) the raw cotton produced in the growing season all over the world, and (c) the world's annual consumption in the cotton season. The Current Statistics include (a) the amount of cotton moving into sight any week from fields, i.e. the world's primary supply; (b) the amount of cotton forwarded definitely to the mills, i.e. spinners' takings all over the world; (c) the gain or loss between (a) and (b), and (d) the visible supply of cotton in the world. Under the second factor, important points are: (a) Bank rates and (b) the rates of exchange. Besides the general method of studying the whole situation by the use of annual and current statistics and the history of cotton prices, there are a number of special methods which seem to isolate single factors and predict temporary price conditions. The most common methods amongst them are (1) Chart study; (2) Weather-map reading, (3) Trading on direct information concerning the market position of leaders in the trade, and (4) Trading on gossips, tips, astrological beliefs, etc.

Statistics of world production of cotton and factors affecting it are of fundamental importance in an analysis of the cotton trade and prices. Their importance is due to the fact that the world

production of the staple is subject to wide fluctuations, not only because of changes in acreage but also because of variations in yield per acre through natural causes. Hence, the volume of new supplies of cotton available to spinners of the world is constantly changing. The fluctuations in world production are necessarily reflected in the fluctuations in world prices of cotton. Records of movement of cotton are of importance principally as indications of demand for the staple, and of current or prospective consumption of it. Those covering movement from producing areas may indicate also the rapidity of harvesting and ginning and the freedom with which producers or distributors are selling.

Records of consumption rank with those of production as being of prime significance in the studies of cotton trade and prices. The world consumption of cotton does not vary from one season to another so much as does production, but it is subject to important fluctuations due to changes in general economic conditions, political developments and world buying power. It is also necessarily affected by changes in the supply and price of cotton and to some extent, by the competition of other fibres. Thus, the world's supply and demand, world's economic conditions and international political situations as well as local conditions are all bound up together in the problem of forecasting the prices of raw cotton in any country or in a given market.

Difficulties Involved in Forecasting: The forecasting of supply involves forecasting the acreage, the yield per acre and the quality of the crop. The official reports showing acreage, weather conditions, state of crop, etc., issued by the Department of Commercial Intelligence and Statistics, for the Indian crop, by the United States Department of Agriculture for the American crop or similar official report of any other country do not attempt to forecast the acreage under cotton. It makes simply an estimate of the acreage under different crops as in June, in any year. This estimate is corrected in April in the case of India or in December in the case of the U.S.A. and a general forecast report of the acreage harvested, yield per acre and areas abandoned since that date is issued. The final acreage figure is arrived at by dividing the production by the estimate of the yield per acre. Again, forecasting the yield per acre involves many factors, weather being the prominent item. Other factors are: (i) the use of fertilizers, (ii) labour, (iii) kind and number of pests and the effort used to combat them, and (iv) the price. However, it may be said that the methods of forecasting the crop are highly developed. Periodic estimates of conditions of the growing crop may therefore be made to serve as a basis of forecasting the probable yield.

It will be noticed that there is quite a large number of factors involved in forecasting the world's acreage and yield per acre which tend to frustrate any single attempt at forecasting the world's supply of cotton for a given season. Similar difficulties though

of lesser degree are involved in forecasting the world's demand of raw cotton for any one year, since, it is very difficult to measure the world's potential demand for a given period. Now-a-days, difficulties in analysing the world's supply and demand are greatly increased by uncertainties as to the economic policies of Governments with respect of such matters as control of production and monetary standards. Further difficulties in either arriving at the total supply of or demand for cotton lies in the fact that the world's economic condition and international political developments may tend to upset all our calculations about them.

Special Difficulties to be Encountered by a person attempting to forecast the price of Indian cotton: Apart from the common difficulties involved in forecasting cotton prices an operator in India has to face some special difficulties in attempting to forecast the price of our cotton. Taking first the supply side of Indian cotton, it may be pointed out that there remains much to be desired in the official estimates. Generally, there is a discrepancy between the official and private crop estimates. The figures of actual crop may be arrived at by two methods:¹⁷

- (i) Actual crop: Net exports (exports-imports) of all cotton (by all routes) + mill consumption + village or extra-factory consumption + variation in stocks (stocks at the end of the season—stocks at the beginning of the season).
- (ii) Actual crop: Cotton pressed + loose (unpressed) cotton consumed in spinning mills + net exports of loose cotton (by all routes) + village or extra-factory consumption of loose cotton.

The application of the above formulae, however, suffers from certain limitations. For instance, statistics of cotton transported by road are not available in most cases. The estimate of 450,000 bales of cotton known as village or extra-factory consumption and used for domestic purposes such as hand-spinning, the making of quilts, mattresses, etc., is based on the results of enquiries conducted by the Indian Central Cotton Committee in selected areas only. Moreover, this estimate is assumed to be constant which cannot be safe for any given season. As regards variation in stocks, the figures cannot be claimed to be complete. Further, formula (ii) assumes that variations in stocks of ginned unpressed cotton and kapas is negligible, which however, is not always the case. For instance, the figure for total actual crop for the year 1939 was 6.2 million bales while the figure as per April 1939 All India Cotton forecast was 5.1 million bales. If the size of the average Indian cotton crop of about 6 million bales is taken as the standard, an error in an official crop report which would lead to an ultimate

¹⁷ Refer to Report on the Accuracy of the All India Cotton Forecast of 1938-39 season. I.C.C.C. p.1.

depression of Rs. 5/- in the price of a bale would cost the farmers three crores of rupees or more. A corresponding error leading to a similar rise in price would entail upon manufacturers and consumers a comparably heavy loss. This is unsatisfactory.¹⁸

Accurate forecasting in case of our cotton is no more difficult than in the case of American cotton. But the method of issuing the crop reports adopted by the Department of Commercial Intelligence and Statistics is such that the statistics of total supply become available only when the season is over. For example, the first forecast of the 1939-40 crop showing an acreage of 14 millions under cotton did not relate to the entire cotton area.¹⁹ It did not mention an estimate of the final outturn but gave the reports as received to a particular date. For this reason it is never possible to give in due course concise official details of the total supply of Indian cotton. These defects in estimate according to an enquiry conducted by the I.C.C.C. had their origin in the manner of estimating the area, anna valuation and standard yields of cotton. It may therefore be hoped that the present official crop estimate would be improved upon so as to render them most satisfactory by taking steps to remove whatever defects exist in them.

But this is not all. It is a well-known fact that the price of Indian cotton is not finally determined from conditions in India alone. It is said that the price of Indian cotton is determined not so much by conditions in India as by the price ruling in America.²⁰ As a matter of fact, the price of American cotton not only leads our prices, but also dominates the world's cotton markets.²⁰ The main factor which determines the relative prices of American and Indian cotton is the success or failure of the crop in the two countries. In normal times the annual world production is of the order of 28 to 30 million bales. India's share is 5 to 7 million bales, while America contributes 12 to 14 million bales. The effect of changes in these figures of production on the import and export trade of India is very considerable, in as much as, the parity difference between the prices of Indian and American cotton widens or narrows with the production and consumption situations of the respective growths both at home or abroad. Of course, the seasonal differences in the parity are natural according to the vicissitude of demand and supply of the same, e.g. the sharp advance in the prices of American cotton following the restriction of output caused these prices to rise above their normal parity difference with Indian cotton. This situation favoured a large disposal of our

18 It is gratifying to note that the question of improving the accuracy of the official cotton forecasts has been receiving the close attention both of the I.C.C.C. and Provincial authorities for several years.

19 Refer to First Cotton Forecast 1939-40 released by the Department of Commercial Intelligence and Statistics, India.

20 Table showing price movements during the season 1938-39 in the markets of New York, Liverpool and Bombay. (Foot Note 20 Continued on Page 215)

cotton during the greater part of 1934.

With world consumption in normal times at about 28 million bales, India takes barely 3 to 4 million bales and has a surplus of 2 to 4 million bales to export. This surplus of Indian cotton which, as is well known, is generally of shorter staple and lower in quality than American cotton, is taken by foreign countries on its parity difference with the American cotton. So long as our country has to export a considerable portion of the Indian crop, the price of Indian cotton will be ruled by what the surplus of Indian cotton abroad will fetch.²¹ Expressed alternatively, the price level of

(Foot Note 20 Continued from Page 214)

Thursday	Wed. night N. Y. closing futures reaching in Bond on Thurs. Morning (Cents per lb.)	Liverpool American export led to open (d. per lb.)	Bombay Branch expected to open (R. per candy)
September 1933			
1	8.28 (May)	4.79 (May)	159 0 (Apr./May)
8	8.06	4.67	156-0
15	7.81	4.65	152 8
22	7.98	4.69	153-8
29	7.60	4.82	152 8
October 1933			
6	6.14	4.75	150 8
13	9.11	4.79	156-0
20	7.06	4.73	152 0
27	8.28	4.88	151 0
November 1933			
3	8.26	4.84	154-0
10	8.24	4.75	157-0
17	8.28	4.84	158-0
24	8.26	4.81	158-0
December 1933			
1	8.27	4.82	160-8
8	8.09	4.61	157 0
15	7.90	4.66	158-0
22	8.14	4.80	159-0
29	8.27	4.87	161 8
January 1934			
5	8.25	4.99	163 0
12	8.08	4.70	157-8
19	8.17	4.78	156-12
26	8.16	4.75	154-0
February 1934			
2	8.09	4.76	153 8
9	8.06	4.72	152-8
16	8.08	4.67	148-8
23	8.08*	4.78	148 8
March 1934			
2	8.21	4.88	152-8
9	8.24	4.98	152-0
16	8.38	5.01	155-0
23	8.17	4.81	152-12
30	8.08	4.62	154-4

*Wednesday morning quotation.

21 R. G. Saraiya: Presidential address delivered to the Cotton Association of the Sydenham College of Commerce, 25-2-1940.

the Indian crop for a given season is determined by the exportable surplus. This level in its turn depends largely, but not entirely, on the price at which American cotton is sold in world markets, because, America is the largest cotton producing country in the world and the price paid for it has a very large international significance. It will thus be noticed that there are two principal factors of predominant importance; viz., (i) India produces only a small fraction of the world production and (ii) has a surplus of cotton to export to the world. This explains the reason why prices of Indian cotton quoted in our markets as well as in those of the world generally move in sympathy with American prices. One can therefore say that for the broad movement, the price of our cotton rises or falls with that of the American.

For the long term fluctuations, however, the price of Indian cotton is influenced by local conditions, Indian mill consumption, exports, 'domestic consumption' and the exchange rate. So far as the short-term variations are concerned the price of our cotton is affected by market news, operations of the prominent dealers, hedging and badla business, teji-mandi transactions, general economic and commercial conditions in India, political situation and activities in a spot market. Thus, an operator attempting to forecast the price of Indian cotton has to take into account and duly provide for each of these factors, both individually and severally.

How far cotton price, can be forecasted in advance? In spite of all these common and special difficulties involved in forecasting the price in advance, attempts to do so are being made daily, regularly and continuously both in our country and abroad by the dealers in cotton futures. Let us therefore inquire, by taking the Bombay market as an illustration, whether cotton prices can be successfully forecasted in advance and if so, how far.

A considerable difference of opinion prevails on the question of price forecasting. The theory is that a composite judgment of traders is superior to individual judgment and this should be reflected in an advance movement of prices. It is impossible to know just what the course of spot prices would have been in the absence of futures markets. It is possible however to gain an insight into the problem of forecasting by comparing prices at different points of time in one and the same market. The most promising approach to the problem is, to compare current or spot prices during a delivery period with futures prices for that period as they prevailed at some earlier time. For instance, spot prices during the months of April and May might be compared with the April/May futures prices prevailing either in September and October or in December and January on the theory that September and October or December and January prices of the April/May futures contract, consti-

tute the composite judgment of the market at that time of what spot prices are likely to be in the months of April and May.

Table showing prices* of Broach April/May futures contract as forecasted during the months of Sept./Oct. and Dec./Jan. and realised during the months of April and May

September		October		December		January		April		May	
Wk	Price	Wk	Price	Wk	Price	Wk	Price	Wk	Price	Wk	Price
ending Rs n		ending Rs n		ending Rs n		ending Rs n		ending Rs n		ending Rs n	
1930-31											
4	210 12	2	200 4	1	150 8	1	155 1	2	200 0	2	179 8
11	208 4	9	196 8	11	178 8	6	171 12	9	195 12	14	173 4
18	255 12	16	196 0	14	177 12	15	179 12	16	195 8	21	174 8
25	207 12	23	195 8	25	175 4	22	181 0	23	193 13	25	173 4
		30	201 0			29	169 8	30	182 4		
1931-32											
3	153 4	1	161 12	3	186 12	7	200 0	7	181 12	5	173 12
10	149 0	8	160 12	10	200 8	14	208 12	14	183 8	12	172 12
17	148 4	15	168 12	17	191 4	21	211 4	21	181 8	19	166 8
24	153 8	22	175 12	23	197 12	28	209 4	29	193 0	25	167 4
		29	180 8	30	197 12						
1932-33											
1	253 8	6	215 6	1	203 0	5	200 12	6	171 8	4	186 4
8	257 0	13	205 12	8	196 0	12	201 1	13	175 8	11	194 4
15	228 0	20	204 8	15	195 0	19	211 4	20	178 4	18	200 0
22	214 0	7	209 4	22	211 8	26	197 4	27	179 12	25	199 0
29	223 4			29	196 12						
1933-34											
7	200 0	5	196 12	7	177 8	4	155 6	5	194 0	3	186 12
14	195 0	12	189 4	14	181 6	11	197 6	11	197 12	10	192 12
21	203 4	19	187 4	2	181 6	18	200 6	19	199 6	17	192 4
28	201 0	26	189 4	28	180 8	25	198 8	26	193 12	24	198 0
										25	196 0
1934-35											
6	226 0	4	208 12	6	223 0	3	211 4	4	219 12	2	243 4
13	222 8	11	206 8	13	226 4	10	211 8	11	227 8	9	247 0
20	215 0	18	211 8	20	228 4	17	211 6	18	231 4	16	250 0
27	212 0	25	209 8	27	211 12	24	252 4	25	238 0	23	251 12
						31	250 6			25	251 4
1935-36											
5	191 12	3	208 12	5	223 4	2	218 0	2	197 12	7	198 0
12	199 0	10	217 4	12	222 4	9	215 8	9	197 4	14	197 8
19	199 12	17	215 12	19	218 4	16	205 12	16	194 4	21	200 4
26	206 8	24	215 4	26	217 8	23	205 0	23	202 12	25	199 0
		31	214 8			30	201 12	30	200 4		

*Weekly averages as given in Indian Cotton Review.

September		October		December		January		April		May	
Wk.	Price	Wk.	Price	Wk.	Price	Wk.	Price	Wk.	Price	Wk.	Price
ending Rs.	as	ending Rs.	as	ending Rs.	as	ending Rs.	as	ending Rs.	as	ending Rs.	as

1936-37

3	210 12	1	218 8	3	218 4	7	227 4	1	245 8	6	227 12
10	216 8	8	219 4	10	219 12	14	230 8	8	248 8	13	230 8
17	220 0	15	218 12	17	223 12	21	227 8	15	244 8	20	230 12
24	217 8	22	222 4	24	223 0	28	225 12	22	237 4	25	235 4
		29	219 0	31	230 0			29	230 8		

1937-38

2	189 0	7	165 0	2	163 8	6	171 8	7	159 12	5	159 4
9	189 4	14	160 4	9	162 0	13	176 8	14	158 8	12	158 4
16	185 8	21	164 12	16	166 8	21	173 12	21	163 8	19	159 4
23	183 4	28	162 4	23	171 0	27	169 12	28	163 8	25	152 8
30	174 4			30	170 0						

1938-39

1	159 4	6	154 8	1	160 0	5	162 12	6	153 0	4	156 8
8	157 0	13	155 8	8	157 0	12	158 12	13	151 4	11	162 0
15	153 4	20	153 8	15	157 8	19	157 4	20	152 8	18	166 8
22	152 4	27	153 12	22	158 0	26	155 8	27	154 0	25	171 0
29	151 8			29	150 4						

1939-40

7	179 0	5	194 0	7	208 0	4	316 8	1	234 8	2	260 8
14	189 12	12	193 0	14	301 0	11	321 1	11	245 0	9	263 12
21	211 12	19	199 12	21	322 1	18	305 4	18	250 4	16	229 8
28	205 0	26	195 4	28	302 0	25	279 8	25	249 0	23	198 8
										25	197 8

The obvious shortcoming of this theory is that conditions change between the time of forecast and that of its fulfilment. A perfect estimate may have been made in the month of June of probable prices of a futures contract in September, but since weather conditions cannot be forecasted beyond the limits of a few days, this forecast must fail if growing conditions change. The point is that the effects of anticipation in September, October, December or January cannot be read in spot prices without allowing for other influences which may have played their part.²³ It is true that futures are traded in 12 months in advance of their maturity. But this does not mean that futures prices fully reflect the prices that will be actually realised when the delivery period comes. The expectations formed by the professional dealers and the speculators themselves do not take the form of what the price will be at definite future dates. Again, trading interest centres largely in one position or delivery period of a futures contract at any given time. The forces reflecting prices are most likely to be first reflected in it. This becomes the standard to which the level of spot prices and

²³ "The situation is so frequently changed by appearance of new and unpredictable conditions that futures prices only imperfectly foreshadow the prices that will be charged in the future". C. O. Hardy *Risk and Risk-aversion* 1924, p.217.

the prices of other positions of the futures contract are adjusted. Further, the outlook and operations of most of the traders do not extend beyond a few weeks. There are still others who are interested in the probable course of prices only during the next day or two. They buy the May contract because in India, it affords the broadest medium of trading on the Bombay market. At the most, their interest is only concerned with prices current during next few days or weeks. Hence the period of forecasting can be expected to extend only to a few weeks or to be more exact to a month or two at the most.

Conclusion: Since the supply and demand factors which determine the level of cotton prices change from month to month it is impossible for any person to interpret and express all the factors entering into the forecasting of prices. The market is too big to be judged on the basis of the facts which come to the attention of any dealer in the course of his daily routine. No individual, however, keen in his foresight can claim that he can successfully foretell the coming changes in cotton prices for a number of months in advance, for, there are larger unknowns or gaps which cannot be foreseen or filled up even by the most careful forecaster. This leads us to conclude that cotton prices cannot be forecasted for minor or day-to-day fluctuations and for a duration of time involving several months. All that can be achieved is that the trend of cotton prices can be forecasted for the period immediately ahead. The period immediately ahead is not a fixed length of time but it may cover at the most, four or six weeks and not more. The probable explanation for this state of affairs lies in the fact that over and above the difficulties involved in arriving at the world's total supply and demand for a given season, general economic and political developments enter the arena of cotton prices so often that it is improbable, if not impossible, to isolate both their relative importance and respective influence.

CHAPTER XIII

TEJI-MANDI OR OPTION BUSINESS

IT has been said that Teji-mandi or Option business has always been a popular medium of speculation on the organised markets particularly in India. It seems that business in Teji-mandi contracts has been done for the last one century. Its origin lies in the transactions of Opium trade in the forties of the 19th century. A tremendous amount of speculation was carried on, on the price that opium would fetch at the Government periodical sales. The business was better known as 'Nazarana Transactions'. With a view to stopping gambling in these transactions, the Prevention of Gambling Act, XXI of 1848 was passed. However, the business was carried on as usual.

1. TECHNIQUE OF TEJI-MANDI TRANSACTIONS

Meaning of terms 'Teji' and 'Mandi': 'Teji' denotes a rise or an upward trend and 'Mandi' a fall or a downward trend. On a speculative market 'Teji' implies a 'bullish view' and 'Mandi' a 'bearish view'. 'Teji' corresponds with what is known as 'Call' in foreign markets and 'Mandi' with 'put', and 'Teji-mandi', 'Call and put'.

Kinds of Options: Various kinds of options are employed by the trade for the purpose of dealing on a futures market. These options are mainly of two kinds: (a) Single option and (b) double option. Single option refers to either 'Teji' or 'Mandi' while double option to both 'Teji' and 'Mandi'. The business in India is popularly known as the teji-mandi operations, whereas on the foreign exchanges it is called 'option' or 'privilege' transactions. There are two parties to do business in teji-mandi operations. One party buys the right and the other sells it. The former is called a buyer of options and the latter a seller. According to the phraseology of the Indian market, those who sell options are technically known as 'Khanaras' and those who buy are called 'Lagadnaras'. Similarly, the sale of options is commonly spoken of as teji-mandi 'Khadhi' and the purchase as teji-mandi 'Lagadi'.

Definition: The definition given by the Wiles Committee may first be considered. "An option may briefly be described as the purchase of a right to buy or sell cotton at some time in the future, when a fall or rise in the market price makes it profitable for the buyer of the option to do so. A Teji or call option is an option to buy cotton. A Mandi or put option covers the right to sell cotton. And a Teji-Mandi or Double option gives the buyer the

right to buy or sell as the market may suit him."¹ This definition does not cover all the phases of teji-mandi operations, as there is no mention of the price to be paid for obtaining the valuable 'right' to buy or sell. Moreover, it is too general in nature and does not put the time limit recognised by others. Another definition which runs as under is worthy of consideration: "Teji-mandi business means an operation under which one party by paying or agreeing to pay a specific amount of premium to the other party gets the right of declaring upto a certain date his option of purchase or sale according to the teji-mandi applied by him; and during this period the applier can take advantage of fluctuations in the market by open sales or purchases which, of course, will be covered by his teji-mandi business as far as any loss is concerned."² A word or two on this definition should suffice. It will be noticed that the definition is not only enlightening but also brings out the nature, character and peculiarities of options. It goes a long way in explaining certain aspects of these highly technical phrases which the former definition fails to touch. According to this definition, the elements constituting the common conception of the teji-mandi transactions are: (a) A buyer pays or agrees to pay premium (b) to a seller of teji-mandi (c) to secure the right to buy or sell (d) a certain number of bales (e) on or before the stipulated date (f) at the rate applied by him. The latter half of the definition throws light on the two important aspects, viz., (i) the buyer can take advantage of intermediate fluctuations in the price by entering into any number of open transactions and (ii) in so far as any loss is concerned, it is limited to the money paid or payable as consideration.

Procedure: Now let us turn for a while to the practical side in order that the technique of the teji-mandi may be thoroughly grasped. The procedure of doing teji-mandi business is that an operator buys teji-option if he expects the market to go up and mandi-option when he thinks that the market will go down. In the circumstances where it is not possible to judge a definite tendency, the operator chooses to purchase the double option which can be exercised any way according to the trend of the market. Thus, if a man looks for a rise but is not sure as well as ready enough to bear the risk of buying outright, he prefers to buy a teji option, and conversely, one who prefers instead of selling short in as much as, he holds a bearish view, resorts to buy a mandi-option. When a man has no clear view of the market and still wants to operate without shouldering any more financial liability than he can afford, he buys the teji-mandi option. Whenever, a man wants to indulge in options all that he has to do is to ask his broker to buy, teji, mandi or teji-mandi options with payment or with agreement to pay in cash at the ruling rate of premium.

1 Report of the Cotton Contracts Act Committee, 1930, p15.

2 This definition is supplied by an important concern in Bombay which prefers to be anonymous.

In any case, it is not obligatory on the part of the buyer either to sign the counter-part of the contract sheet or to enter into any sort of commercial commitment at all, even if his views turn out to be incorrect. But during the currency of the option whenever the price shoots up and becomes favourable, the buyer has a right and can enforce it by asking his broker to close the contract. He can reap the full advantage of his correct forecast by way of earning the whole difference between the price on which he bought the option and the closing price of his operation.³

The options are also bought and sold at the distant market prices. This is a special form of teji-mandi business known as 'Gulleys'. The peculiarity of 'Gulley' options is that the teji-gulley can be bought on the prices higher than the ruling price of a particular contract and the reverse is the case for the mandi-gulley. Double-gulleys can be bought at so much higher and so much lower than the current market price.

It may be noted that the frequency of the teji-option being dealt in is greater than that of the mandi, the probable reason attributed to this is that the majority of traders are more inclined to be optimistic rather than pessimistic. As a result, they more often see a coming rise than a likely fall in cotton prices.

Illustrations: To explain the teji-mandi business in detail some concrete examples may be given here.⁴ Suppose the current market rate of Broach is Rs 150/-. If chances appear in favour of an advance an operator may buy teji 100 bales, the premium for which may be, say, Rs. 8/- per candy. This means that he has to pay Rs. 8 x 50 candy — Rs. 400, per 100 bales. He can sell off at any time against his teji but in order to have a real profit he should sell only after the market advances more than the premium paid because up to the advance of Rs. 8/- he would get back the premium money only. He would get net profit with any further advance in price. If the market is expected to decline the operator may then buy mandi on the same price. The premium for the mandi will also be Rs. 8/- per candy or Rs. 8 x 50 candy = Rs. 400/- per 100 bales. He has thus to invest Rs. 400/- in either case for doing the option business of 100 bales. When the market declines he can buy at any time against his mandi. Here also he should buy after the market declines sufficiently to recover the premium in order to secure a net profit. If the trend is not ascertainable, the operator may apply double option. Its premium would naturally be double. Suppose the current market price is Rs. 150/- the double option would cost him Rs. 16/- per candy or Rs. 16 x 50 candy = Rs. 800 for 100 bales. It being teji-mandi

³ In the case of a client, brokerage is deducted.

⁴ All these examples are from the buyers' standpoint and drawn from the normal times. A fraction of a rupee is not taken with a view to avoiding detailed circulation.

the operator can act on any side of the market. But he has to remember that his profit would begin after he is able to recover the double premium that he has invested.

If the operator in the three cases just cited above, does not wish to make any intermediate transactions against his options the probable situations will be as under:

(a) **Teji example:** Suppose the prevailing price touches Rs. 160/- the operator who bought teji on Rs. 150/-, can close his transaction by declaring it a purchase which must, of course, be sold out at the ruling rate, i.e. at Rs. 160. He will get Rs. 10 per candy or Rs. 500 - for the deal. As he has invested Rs. 400/- his net profit will be Rs. 100/-. If he has bought mandi on Rs. 150/- not only will he in this case get nothing but lose the premium money of Rs. 400/-. If he has bought teji-mandi, he will get back Rs. 10/- per candy or Rs. 500/-. As he has originally invested Rs. 800 in that case, he will on the whole lose Rs. 300/- on a business of 100 bales.

(b) **Mandi example:** Now suppose the market goes down instead of going up and touches Rs. 140. He will declare his mandi as a sale which will bring him a net profit of Rs. 100/-. Teji will put him in the position of a loser of Rs. 400 -. Teji-mandi will result in a net loss of Rs. 300/-.

(c) **Teji-Mandi example:** The chance to make money for the operator who has bought double option will only come when the price oscillates so much so that it may go either above Rs. 166/- or below Rs. 134 -. In such cases he will recover all his investment and reap profit, if possible. Suppose the market touches Rs. 170 or Rs. 130, his net profit on either side will amount to Rs. 4/- per candy or Rs. 200 - per 100 bales.

(d) **Gulley example:** Finally, an example of gulley operation may be taken. If the ruling market price is Rs. 150 - the operator can apply teji-gulley or mandi-gulley and teji-mandi-gulley on rates Rs. 10, Rs. 20, Rs. 30, etc., lower or higher than the ruling price. Suppose he buys teji-gulley on Rs. 170 - and pays the premium quoted for it, he can operate against this by selling when the market touches Rs. 170/- or higher, and can cover it afterwards when he gets suitable fluctuations. Similarly, he may buy mandi-gulley at say Rs. 130. He can operate against this by buying when the market touches Rs. 130 - or lower, and can cover the same when he thinks it advisable. In the case of teji-mandi-gulley he may make the best of either side. It may happen that the gulley operator would not get a single chance to operate. His loss is, however, limited to the extent of his small investment only.

Interim Operations: In some cases when much advance is not possible it would be advisable to sell against the options even before the whole premium money could be recovered. By so doing

an operator would get the benefit of the decline or rise in prices and thereby cover the premium. Such operations should be covered off and on according to the market tendency. When he covers, his option becomes open again. A party can buy or sell in this way as many times as he thinks advantageous against the options. Suppose the market declines to Rs. 140/- and if he does not expect a further decline, he may buy against the options although his full premium may not have been recovered. If instead of declining the market begins to advance, he may decide to sell if he thinks that the market has sufficiently advanced. By these operations of sales and purchases against his options he can get back the whole amount of the premium and sometimes may be able to secure a decent profit provided the market fluctuates and does not remain stationary. Thus, a clever trader can if he makes the use of opportunities enter into a number of operations under the protection of options.

Apart from the interim operations, traders may employ what is known as the 'method of conversion'. Under this method, he would sell 50 bales out of 100 at the rate at which he applied teji and keep the remaining 50 bales open for teji. His sale of 50 bales affords him the mandi too. Conversely, he would buy 50 bales and turn the half into teji in the case of mandi business. This kind of business is carried on especially by those who are, reluctant to part with the double amount of money demanded by a seller of the double option and still may be desirous of providing against an unforeseen eventuality. At the time of buying of a single option they therefore enter into a converse operation for half the number of bales of the original quantity at the ruling price on which they have applied their single option, and hope to get the same sort of protection which the double option offers, of course, at half the premium. These people can also do a lot of jobbing business on their options and make a profit while the option lasts or they may either sell outright or buy against options if they so choose. But it imposes a limitation on his total turnover and he has to be content with half the business of the original lot entered into.

Premium: In securing the right or option a buyer has to pay to a seller certain considerations generally called teji-mandi premium. The determination of the premium is exclusively within the power of seller and a buyer has but to pay the amount so fixed.⁵ The seller takes all the risk for so small a consideration that it would not be fair for the buyer to get his say in this matter. In fact, no buyer has ever tried to dispute the seller's right of determining the premium money. Moreover, the competition among the sellers is so keen that quotations are found most reason-

⁵ Interest is to be deducted at the rate of $4\frac{1}{2}\%$

able to secure a larger amount of business.¹ These quotations vary from time to time in order to keep pace with market fluctuations. The premium for a teji option is always identical with that of a mandi for the same interval of time. A question arises whether in a rising market the amount asked for the teji is in any way more than that for the mandi and vice versa. But such a discrepancy has no room to arise, for, the rule of quoting the premium is that the teji at any moment costs the same as the mandi and half as much as the teji-mandi. In practice, however, a sum of annas four is charged more for a single option and is known as the jobber's turn. Apart from it, the rule must be qualified by the fact that under exceptional circumstances, it may not be possible for sellers to maintain always the same relationship between the premium quotations for teji or mandi and teji-mandi.

The premium rates for the gulleys are comparatively much lower than those quoted for the ordinary teji-mandi options. This rate goes on declining with the increase in the distance of prices from that prevailing in the open market. The buyer of gully has to pay a smaller amount of consideration, because, the risk of the seller who may be called upon to fulfil the contract is much less in the first instance and still less in the second. The whole sum received as the premium on gulleys is practically swallowed away by the sellers in normal times.

As to the factors taken into account by sellers in fixing the premium money to be charged, it may be said that there is no particular system of an actuarial basis on which sellers can safely rely. They are guided in their dealings chiefly by the 'speculative impulse' and sometimes by a 'guess'. The speculative impulse is in turn influenced by two principal factors; viz., (i) Duration of the teji or mandi and the teji-mandi and (iii) fluctuations in the market. The duration of options depends upon the length of time during which they are to run. The longer the period, the higher is the premium rate and vice versa. With regard to the second factor, the range of fluctuations has an intimate relation with the premium amount. The risk of sellers varies directly with the pro-

6 Quotation Table

		Bench	Annual	Monthly	at Rs.	153 12
					Annual	Monthly
					Rs.	Rs.
Teji-mandi					13 6	2 12
Teji					7 0	1-6-6
Mandi					6 12	1-6 6
Annual	Teji-Mandi			Teji at		
	10%	1 10		Rs.	165	4-8
	15%	2 11		Rs.	170	2 10
	20%	2 0		Rs.	175	1 14
	25%	1 9				
Monthly	3%	0-0				
	5%	0 4				

¹Supplied by J. D. Thacker, 9 8 1939.

bable chances of price stability for a certain period. The more unstable the market fluctuations become the greater is the risk to sellers and consequently, the higher will be the premium quotations and vice versa.

Long and Short Range Options: There are daily, weekly, fortnightly, monthly and annual teji, mandi and teji-mandi options. These options may conveniently be divided as (i) long-range options and (ii) short-range options. Except the annual options which come under the long-range, all others fall in the latter group. The long-range option is the most popular form of teji-mandi business in India. It opens with the new year's crop and the 25th of April is regarded as the date of maturity for the May contract. Similarly, another annual option can be availed of when the July contract opens. The maturity date of this option is fixed as the 25th of June every year. Under the short-range option the monthly period is most popular. The trading commences on the 16th of every month and the date of settlement is the 21st of the ensuing month. Daily option business is done in Karachi, while weekly and fortnightly is carried on in Bombay and Ahmedabad. Generally, option transactions are so arranged that they mature on or about the day preceding the maturity date of particular contract. This seems to be in conjunction with the rules and regulations governing the futures contracts.

Declaration Day: Whether an operator enters into any kind of operations against his options or not, he has to settle the business finally on the due date when the option expires. This last date is the day on which options are to be declared and is called the 'declaration day'. After that date the business becomes open. The nature of the option business requires that an operator should exercise his right by declaring or electing either to be a buyer or a seller on the due date. It is said that in a majority of cases the option declares its own position. This is alright in cases where the market prices are higher or lower on the declaration day than the prices on which the option was bought. The seller asserts his position by a common practice that a certain option would be declared as a purchase or a sale. This practice of taking things for granted is at times liable to cause misunderstanding. It is therefore advisable to be on the safe side and formally declare one's own intention with a view to avoiding possible misgivings. Further, there are circumstances under which it is difficult to clearly differentiate between the closing price and the price on which the option was applied. In such cases, option may not and probably cannot speak definitely for itself. There is one technical term used in cognition of this state of affairs, known as teji-mandi 'Dubgai', i.e. option lapsed. As a matter of fact, a majority of the traders are satisfied with this sort of automatic settlement, thereby forgoing their most important privilege of making a formal declaration of their intentions. It is necessary therefore

to emphasise that under any circumstances, the formal declaration of one's intention to become either a buyer or a seller on the due date must officially be made. Obviously, this will make the position of a buyer and a seller quite clear and most businesslike.

Nature of Teji-Mandi Transactions: Teji-mandi operations are no doubt regarded as commercial transactions, but they are not the contracts of the usual type that one generally comes across on an organised commodity market. Their peculiar nature lies in the fact that they do not constitute outright sales or purchases of cotton between the parties at the time the contracts are first entered into. Instead they give rise to the 'right' to sell or buy cotton on a stipulated future date. The party in question is at full liberty to buy from or sell to the other party without any compulsion. This is true so far as a buyer of options is concerned but the position of the seller is just the reverse. Stated otherwise, the teji-mandi contracts are unilateral and not reciprocal. The unrestricted choice of the buyer is a feature of these contracts. It is this freedom of choice given to the buyer that makes the business more attractive to a dealer. If the freedom or the right of becoming a buyer or seller is taken away, the transaction will become nothing short of ordinary futures contracts.

Further, the most important point is whether to exercise the right or not. This may be regarded as an arch-point in options. The moment a party exercises the right, his transaction is no more regarded as a teji-mandi transaction. It becomes an open futures contract subject to the rules and regulations of an exchange. When the right is exercised a mandi turns into a sale and a teji into a purchase. For instance, suppose A bought 100 bales as teji on 1st December at Rs. 175/- and he exercised his right of becoming a buyer on 20th December, say, at the then ruling price of Rs. 190/-. Now this becomes an open futures contract between the seller to sell and A to buy 100 bales which he may sell off and pocket the gain immediately or afterwards. The reverse will be the case in the case of mandi. Taking the case of teji-mandi, suppose A bought teji-mandi of 100 bales at Rs. 175/- on 1st December and exercised the right on 20th December when the price was ruling, say, at Rs. 190/-. Now his mandi is lost but teji gives him a right of becoming a buyer and the transaction becomes an ordinary futures contract. In such a contract, cotton is deliverable at the instance of a party concerned. Otherwise, a party in question may bring about a settlement by the usual method of 'offset' and exchange the difference, if any. In this way, the resulting contract becomes a futures contract on the due date of the teji-mandi transaction.

Options Compared with Futures: Option transactions may now be compared with futures operations with a view to note the points of difference between the two. Those who are on a futures market and make use of options say that they employ teji-mandi

because it is a speculative transaction within limits, and therefore, a better contract than an outright speculative dealing in futures. Of the two contracts, options are regarded as less speculative than futures. A dealer in options may incur a loss to the extent of the premium money involved whereas in the case of open sale or purchase it is hardly possible to operate with a limited amount. The risk in a futures contract is in the first place an unknown element, and secondly, it cannot safely be limited to one's financial capacity. In the teji-mandi business, the element of risk is predetermined and therefore it can be measured in advance. Since risk can be decided at the time of buying teji-mandi, a dealer can limit it to the extent of his financial capacity and willingness to part with his money.

2. INFLUENCE OF TEJI-MANDI BUSINESS

It has been claimed that teji-mandi business was devised by human ingenuity to minimise risk. Another reason as to why these transactions are so widely indulged in seems to be the fact that they afford a very useful mode of speculating on the commodity exchange. Traders in almost all commodity exchanges in India indulge in these transactions and cotton markets top the list, both in the volume and the amount staked. Its cheap popularity lies in its utility to the various trade interests.

Functions of Options: The first and foremost function of option is to act as a sort of insurance against the probable rise or fall in prices. Option is employed to bridge the gap between the prevailing price and the probable future price. Teji-mandi is availed of to ease off the difference between a day's, week's, fortnight's, month's, or year's trading operations. The important economic significance of teji-mandi business lies in the fact that the option transactions are useful to the trade particularly from the viewpoint of a buyer of options.

Economic Utility of Options: Options can be put to a legitimate use by all sorts of operators on a futures market. The dealer who buys a mandi option insures against the market falling, but stands to gain if it rises. In the case of a teji option, the insurance is against the market rising but if the market declines he stands to gain. Similarly, in the case of teji-mandi a dealer insures against both the market falling or rising. It has the protective value to merchants, traders, manufacturers, agriculturists, factory-owners and speculators. For instance, a ready cotton merchant long of actual cotton, if he buys a mandi and waits till the market moves up to a certain extent, he might make a good profit on a comparatively small amount of premium. If the market declines he has got mandi's full protection. Again, a trader having some definite prognostications for a big rise or fall in prices can, by applying the gully option up or down for a paltry amount, reap the whole benefit without any undue risk if his forecast materialises. Simi-

larly, a manufacturer of yarn or cloth on application of option can limit his risk on the stocks on hand, and at the same time it gives him freedom to make profits on his stocks if the market advances during the period. A factory-owner can also avail himself of this business. Some people at times avoid hedging and for them option is useful. Finally, a long or short position in foreign markets can be insured by the corresponding application of options in domestic exchanges.

Merits and Demerits of Options: Option-dealing offers a fairly large number of advantages in general, and over the outright purchases or sales in particular. The general advantages are: (a) Unlike any form of known insurance, in teji-mandi business one gets a chance of reaping unlimited profit if the expectations materialise, e.g. some unknown development might take place on account of the occurrence of some eventuality and a trader may be placed in a position to realise the whole amount of profit. (b) This business can be effected at a small amount of premium. Advocates of option-dealings maintain that even if your forecasts are not realised or you are not presented with any opportunity which would enable you to make money, you have not to worry at all, since, all you will lose is the premium paid and nothing more than that. Moreover, a man with a limited means can do a fairly large amount of business with the risk of a limited loss. (c) Option offers an opportunity of jobbing. A shrewd operator frequently makes use of his option to carry out the interim transactions between the day of purchase and that of the expiration of options, especially when there are such opportunities, both in the case of violent fluctuations as well as in the state of comparative stagnation. (d) Sometimes it saves the market from declining further. The business has been a source of support in the process of keeping up prices.⁷ (e) It widens the field of demand by bringing more people to trade. It thus increases the volume of business. The market without options would be narrow. (f) It has the protective utility of safeguarding the trader against wild fluctuations. These transactions have helped but not hindered interests of trade in general.

The special advantages of options over futures are that the risk of the participants in the former case is limited and known in advance while that in the latter is both unlimited and unknown. Within limited investment one gets equal chances of gains by buying options. Options are particularly favoured by two types of traders: (i) persons whose means are limited and still desire to do business and (ii) those who want to do business on limited investment only. Moreover, the option business saves an operator from making arrangements for periodical clearings. This is considered as an advantage over the futures contract in a way, because, if a man is a genuine investor and for the moment is short of

⁷ "Had it not been for these transactions, prices in all probability would have been still worse". Seth Begraj Gupta: Times of India, 29-9-1934.

funds either to pay the margin money or settlement amount, he is free from such responsibilities under the options. As a result, it is likely that even the genuine investor may be attracted to teji-mandi and it should not be surprising if genuine traders resort to options.

While the advantages are many, teji-mandi business is not free from drawbacks. Opponents of options are loud in their efforts to establish that the business should be treated as unhealthy because it encourages the speculative instinct. These facilities induce the layman to gamble in cotton creating thereby adverse effects on the business community as a whole. It is therefore argued that this sort of business should completely be done away with, particularly for the sake of the middle and poorer classes. It is emphasised by one section of the trade that the futility of options can better be realised from the moral standpoint. The morality of our society deteriorates when it becomes a hobby of all the classes to indulge in teji-mandi business and every recurring loss plays havoc with the buyer.

Focussing our attention to the economic shortcomings of teji-mandi, it is vehemently stated that options do not serve any trade purpose and hence, should not be regarded as a commercial necessity. On the contrary, they create rather an artificial demand and supply of contracts than a bona fide situation in a market. The atmosphere created by options is regarded as economically unhealthy causing at times a violent disturbance in the price structure. Again, loss being limited, teji-mandi allures a layman to take a chance and thereby add to the artificial transactions. This affects the market and keeps the prices unduly high or low for some time, which ultimately becomes a sort of nuisance to the genuine trader. Hence, if they are withdrawn from the market, the trade will be confined to bona fide traders. Further, it is said that when an option-seller has to unload on an unwilling market in competition with actual holdings of cotton, his endeavours keep the prices down and our cotton may be sold cheaper than that of others. Finally, a plea is made by some on the ground that teji-mandi is not a constitutionally recognised form of business in India. Doubts are also expressed regarding its legal status.

Having noted the pros and cons of teji-mandi business, it may be stated here that these operations may be carried out by speculators with a view merely to avoid unlimited losses. To the question whether it serves any trade purpose or not, it may be pointed out that teji-mandi does serve the trade by affording the protective utility to the various interests concerned. In spite of its drawbacks the business of teji-mandi remains popular on account of its advantages of enabling a buyer to carry out his business

8 Ref. to the minute of dissent submitted to the Working Committee by Sri Ness Wadia: Report of the Cotton Contracts Act Committee: 1930.

with small and limited investment and at times with the prospect of reaping a large profit. It may therefore be observed that from the standpoint of a buyer the teji-mandi business is both commercially healthy and economically sound. But the question whether it might not bring about economic ruin of small people is a serious point demanding some deliberation from the authorities concerned, particularly from the Government.

Position of Sellers of Options: The business of selling options is regarded as somewhat risky because it is the seller who undertakes liabilities against the possible fluctuations whereas the buyer is comparatively free from commitments. The seller has to sell options on every price available as well as on any level. He protects himself by constant vigilance and if need be by operating at every notable price movement. In order to protect himself he generally operates for half the quantity dealt in. For instance, if he sells teji-mandi for 200 bales he transacts the business for 100 bales with a due consideration to the trend of the market. He has also to go on changing sides. If he has purchased against options sold and the market shows signs of going down he may immediately sell off the whole lot, and if necessary may make further sale in order to safeguard against the mandi sold by him. If he then finds that the market is going up again, he has to cover those sales and buy sufficient quantity to shield himself against the options sold. He has thus to make a large number of transactions before the arrival of the due date. If at all he is able to earn, it is only a small portion of the amount received by way of premium money. However, in years of small fluctuations the sellers are able to save more. In abnormal times when the market is subjected to every kind of influence, financial and political, the fluctuations become so rapid and violent that it is very difficult for them to maintain stability and earn profits." The seller has to worry much about his position in a market.

A few examples from the sellers' side may be given as some of the buyer's actual trading operations have already been described. These illustrations will help in making the seller's position clear. Suppose Rs. 160/- is the ruling rate and a seller sells a double option at Rs. 20/-. So long as the market remains steady he can afford to be indifferent but the moment it passes beyond Rs. 20/- either side, i.e. at Rs. 140/- or Rs. 180/- level he has to operate. Imagine a case where instead of having sold only 100 bales, a seller has sold several thousands of bales, say, 20,000 for a particular contract. By his sales he has got enough money to cover himself so long as the price moves in either direction by Rs. 20/-. The moment the market touches Rs. 140/-, he becomes an actual seller of 10,000 bales. If it touches Rs. 180/- he

9 We know for instance that out of the four parties that failed to meet their liabilities at the outbreak of the War of September 1939, three were the sellers of teji-mandi in Bombay.

becomes a buyer. If the market still rises, he becomes an eager buyer. The process is exactly the same when the market goes below Rs. 140/-. He would then become a heavy seller.

In this way, he has to carry out a number of transactions on either side according to the price variations, so that his stability may not be threatened. The wider the fluctuations, the greater is the excitement. It is under such circumstances that the position of a seller of options becomes a real problem to the trade as a whole. The seller then becomes the abnoxious part of the teji-mandi business. Since the buyer knows the extent of his loss, teji-mandi may be useful to him. A difficulty arises over the seller, because, there is no settlement for him until the maturity of options. The buyer can at any moment protect himself, but the man who cannot help himself is the seller. The crux of the whole problem of options is the position of the seller for whom it is very difficult to ascertain his own position till the end of the option period. If he cannot ease his position he might bring about a crisis. Since the outstanding liability of an option seller cannot be determined until maturity, and if he fails in the meantime, the market would violently be upset. The result would be that many would suffer particularly the buyers of options. It is merely the price which is in question. It cuts both ways. It may become prejudicial at any moment to the interests of the consumers or the producers. There can hardly be found any means to protect traders against the operations of sellers. If a seller of option fails, there may not be any definite remedy available, because, he might have operated on whatever price levels he liked.

It is therefore imperative that the business should be made with those sellers, who are recognised parties of sound position with large resources at their command. Otherwise, appreciating the difficulties and sympathising with the responsibilities of this section, at times, buyers of option from a weak seller may have not only to waste the premium money but also to lose the opportunities presented during the currency of options. Unless a seller is an expert operator, there is the probability of his being knocked out. Hence, a majority of dealers in this kind of business would certainly prefer to be the buyers to the sellers of options. Since it requires an expert and an alert mind and sound financial ability, the number of sellers of options is small.

Volume of Business: Generally speaking, the amount of cotton involved in these transactions varies directly with the number of buyers and the quantity purchased and indirectly with the numerical strength of the sellers. In other words, the greater the quantity purchased the greater is the volume of teji-mandi business, other things being equal and vice versa. In 1930, the volume of business was estimated somewhere between 6 to 9 lakhs of bales per year.¹⁰ This favourably compares with the estimates received

¹⁰ Report of the Cotton Contract, Act Committee, 1930, p.15.

by us in 1939 that the teji-mandi business in Bombay amounts to 4-5 lakhs of bales on each contract per annum. There being two positions, the total volume might exceed 10 lakhs of bales per year. It is worthwhile to note in this connection that this is after all a matter of estimation, subject to correction. In the absence of any statistical data, 9-10 lakhs of bales a year might be regarded as a fairly good guess for the probable extent of teji-mandi turnover on a leading market in India.

Effect on the Course of Prices: It is asserted that the teji-mandi operations influence the course of prices on a futures market. The trade opinion, however, is divided on this issue. Some people think that option dealings cause violent fluctuations in prices by reason of their huge turnover of either sales or purchases of futures contracts in a given market. This affects the market which tends to decline or advance more than it ordinarily should. They maintain that to safeguard his own position a seller would generally be forced to operate in such a way as to obstruct the natural phenomenon of prices. His large-scale operations ostensibly make the market fluctuate artificially. The liquidation of open interests on the expiration of an option has frequently a tendency either to unduly depress or raise the prices. This may not happen at all in small business, as it will not have much effect on the market. But, once the operations are in large quantities they are bound to affect the prices.

Another school of thought points out that one fact must not be lost sight of and that is, the buyers of options enter into just the opposite sort of business to that of the sellers. This counteracts the undue bullishness or bearishness caused by the act of sellers. They therefore hold that the operations of buyers and sellers are cancelled in the end and the business registers no appreciable effect on the market. They further point out that ordinary business dealings would soon tend to bring about the needed adjustment if there is any dislocation of prices. If options artificially stimulate prices the trend would automatically be arrested by the fact that operators would sell when the prices are higher and buy where the prices are lower, and in consequence, the price adjustment would easily be brought about. It is therefore put forth that the teji-mandi business exerts no more influence than the ordinary speculative operations do.

However, we disassociate with either view and are convinced by our personal observations that if a very large number of teji-mandi transactions happens to accumulate on any one position of any one contract, the natural sequence is that a seller of options will have to buy in a rising market and sell in a falling one. Stated otherwise, it helps both the bullish and the bearish trend in the market and the general result is to accentuate, at least for the time being, to a certain extent the price fluctuations on either side of the market. Moreover, there can be little doubt as to the fact

that the position of the seller of options, as we have examined above, should tend to accentuate price fluctuations in a given market.

3. LEGAL NATURE OF TEJI-MANDI OPERATIONS

The legal intricacies involved in the business require the consideration of the legal status of teji-mandi transactions. It was believed till recently that options are nothing short of wagering contracts. This view is now held to be erroneous and option transactions are ordinarily regarded as genuine futures contracts.¹¹

Question of Wagers Examined: Formerly, there was no unanimity of opinion in the judicial decision on the teji-mandi transactions. One school of thought held that options were 'wagers pure and simple'. On the other hand, some expressed the view that these transactions on maturity result by their very nature into futures contracts and stand on an equal footing in the eyes of law. The elements which distinguish teji-mandi transactions from wagers are: (a) the buyer pays the premium to the seller in consideration of securing a right of declaring a sale or a purchase on a certain day, (b) money paid by the buyer is by way of an insurance premium against the bearish or bullish trend of the market, (c) as in a futures contract a trader gains or loses according to the trend of the market, the option-dealer loses the premium money or gains the whole amount over and above the premium sum, (d) the operator's intention is clear from the fact that options expire a day before the date of maturity of a futures contracts, and (e) both futures and options can be 'offset' and delivery may or may not take place in their fulfilment. Speculation in futures cannot necessarily be regarded as wagering. The difference between the two forms of speculation was explained in 1921 by Justice Kincaid. He stated that teji-mandi transactions are "the less speculative of the two."¹² This was subsequently reaffirmed by the Courts of Appeal and confirmed by the Privy Council in 1926, in *Sobhagmal Gianmal vs. Hukumchand Birla*.¹³

The legal aspect of options is that teji-mandi business is not necessarily illegal. It was looked upon more as a wagering contract because there was some legal doubt as to whether delivery is contemplated or not. The sole point at issue is whether the option has cotton behind it or whether no delivery is contemplated. In the latter case the business is illegal under the gambling law. If there is cotton behind the option and the delivery is contemplated, it is a legal contract.¹⁴ In fact, in all contracts of teji-mandi, deli-

11 R. R. Mody. *The Law of Pakli-Katchi Adat and Teji-Mandi Contracts* 1937, preface.

12 Kincaid, J. in *Manubhai vs. Keshavn* (1921) 24 Bom. L.R.60, 68.

13 R. R. Mody, p. 171.

14 "If the teji-mandi is based on a cotton contract, I presume with the dictum of counsel that it must be taken to be a genuine contract." Sir Gilbert Wiles: *Bombay Legislative Council Debates*: Vol. 31, 1931: pp.693-94.

very is contemplated as soon as one elects to become a buyer or a seller. It is therefore nothing short of a legal contract.

Legal Opinions: The E.I.C.A. and the Cotton Brokers' Association have since long secured some legal advice from their respective counsels on the option business. These opinions are given below:

(a) **Advocate General:** "The purchase of the option is not a transaction in cotton. The resulting transaction is; therefore, the original purchase would not be subject to the bye-laws of the E.I.C.A., but the resulting contract would come under section 2 of the Cotton Contracts Act."

(b) **Bhulabhai Desai:** "These transactions ought to be brought under the purview of the Association's rules. That is the legal aspect of the question."

(c) **Sir J. B. Kanga:** "I cannot understand why the E.I.C.A. should not make rules governing teji-mandi contracts. The contracts in the absence of evidence that they are wagers, should be treated as genuine contracts."

A Recent Case of Teji-Mandi: In order to complete our legal survey it will be appropriate here to cite the recent case of Nathalal Becharadas vs. Anrithlal and others.¹ This was a suit filed by the plaintiffs to recover a sum of Rs. 5,891. The plaintiffs had paid premia for options to the defendants who denied their liability on the ground that the option transactions were not in accordance with the bye-laws of any recognised cotton association and were therefore altogether void. In delivering his judgment Justice Kania said that the "word contract as defined in section 3, sub-clause (c) of the Bombay Cotton Contracts Act IV of 1932 included options and that Section 8 thereof was applicable to option transactions also." The fact was admitted that there was no provision in the bye-laws framed by the E.I.C.A. in respect of options. In his Lordship's opinion the defendants' contention was incorrect. If the bye-laws were silent on a particular point, the defendants would be unable to establish what contracts would be in accordance with the bye-laws of a recognised association. In consequence, the transactions were held as valid and a decree was passed in favour of the plaintiffs.

4. POSITION OF OPTIONS ABROAD

Let us now take a bird's eye view of the position of option business in the important overseas futures markets.

England: Whilst options are not officially recognised in Liverpool, they are not tabooed. The association has not made them

¹ 15 Suit No. 236 of 1935 unreported judgment dated 16th July 1936, given in Mody's book, pp.243-44.

illegal. There is no definite rule barring members from dealing in options. The association recognises the use of a clearing house in order to validate this form of trading and prohibits the credit terms. The business period is restricted to one day before the delivery on a futures contract. The option business is being done on the official Liverpool contract form. If a man in Liverpool buys an option of 100 bales at the prevailing price, the amount paid for the option is written in red ink for a cash consideration of so many pounds, say, £50 per contract. An actual contract between a buyer and a seller of option is passed through the clearing house. First of all, the option is not recognised although it is recorded. The moment, the premium rate is reached, the transaction becomes an ordinary contract. The clearing house will take cognisance of the price which is stated on the form and the option becomes a matter of private business subject to the adjustment between the parties concerned. It becomes an alive contract as soon as the price goes above or below the premium paid on the basis. Therefore the contract in the case of a single option is either alive or dead according to the price level, but in the case of a double option it is alive on both sides. The position of options in Liverpool appears to be this that the association officially does not recognise them in any form whatsoever, but when converted into futures contracts they are duly recognised by the authorities.

Egypt: Apart from ordinary futures contracts there are option transactions regularly dealt in on the Alexandria exchange.¹⁶ Options in Egypt are known as 'Stellage' operations.

Prevalence of Options on Other Exchanges: Option dealings are practised on other organised markets of the world including stock and security exchanges. For instance, options are known as 'privileges' in Canada and 'Puts and Calls' in London. The privileges though in vogue were not formally recognised by the Winnipeg Grain Exchange. In recent years, the exchange has organised a regular market for their purchase and sale.¹⁷ When they were not officially recognised operators used to deal in them before, during or after trading hours. Since their formal recognition, members are forbidden to deal in privileges at any other time than during the trading hours. Apart from commodity markets, options are effected in bullion exchanges, especially in India. The business is also prevalent on the Stock and Security exchanges of Europe, particularly in London, Paris and Berlin markets. It will thus be observed that the option business has been a part and parcel of the world organised markets in general and of the cotton futures markets in particular.

¹⁶ Economou G. D. & Co. Some information about the Egyptian Cotton Market, futures and spot, 1926, p.16.

¹⁷ Report of the Stamp Commission, 1931, p.32.

5. POSITION OF OPTIONS IN INDIA

Present Position in Bombay: The present position of options on the Bombay market is that teji-mandi business is not officially recognised though the trade indulges in it. Hence, its position becomes rather anomalous. There are two systems in vogue at present. One is the cash system and the other is known as the credit system. Generally, the premium for long-range option is payable while buying, but credit is allowed, sometimes, in certain circumstances. On the other hand, credit is commonly given in the case of short-range option and premium money is payable at the end of the period. The business, as in Liverpool, passes through the clearing house. In view of this situation, one serious difficulty arises over arbitration. Business in futures and options is carried on side by side and this makes it interconnected. A good deal of inconvenience is felt by traders while referring the matter to arbitration. In consequence, for a single sum due, it happens that a trader has to refer for a part of the amount to arbitration rules of the association, and for another part he has to submit to the decision of the court, on account of the fact that there are no rules providing for options in the bye-laws of the association. Generally, it is difficult to separate the amount due in most of the cases and much trouble arises out of this. Many a time, it happens that the operator might have his position squared in a general way. Now, as teji-mandi is not subject to the arbitration of the association, his position might remain unclosed and no award can be obtained under these circumstances. This anomalous position of options often does injustice to the trade. If we stress this point further, its logical conclusion will be a timely demand for making rules and regulations governing teji-mandi business and a formal recognition of options.

Need for Regulation: It is relevant to inquire before endorsing the above conclusion whether teji-mandi business can be eradicated or suppressed. With regard to its eradication, it should be pointed out that there is not a single special reason as to why options should be done away with. As far as the issue of suppressing the business is concerned, it may safely be stated that it is difficult if not impossible, to suppress option dealings. It may, however, be observed that if a man overtrades in options, you cannot get rid of him and his liabilities. The market moves from the centre point, whatever it may be and you have got no cover against it. It is therefore imperative that teji-mandi business should be regulated as far as possible by bringing it under the bye-laws of the association.

Dangers of Recognition: A point now may be raised whether there is a need of recognising the options with a view to avoid its present anomalous position in India. It may be admitted that the business cannot completely be suppressed but by bringing it under the rules it can be controlled. Some people express their appre-

hensions that regulation of options may hand over the trade to a few operators who may not really be interested in the intrinsic value of the commodity but whose main concern may be the price difference only. The tendency will then be to pass the control of the trade from the general body into the hands of option sellers. The period for which the option dealers will be able to control the market depends upon two factors: (a) What is their interest? and (b) How far the market can respond? Doubts may also be expressed whether the official recognition by way of formal regulation would not make inroads on hedging. It is possible that a man instead of making use of hedging facilities offered to him by the futures market against his spot transactions may employ options for the same purpose by paying the required premium money. A real danger lies in the probable development of a situation that it might not then be necessary for the trader to make use of his knowledge of cotton but to rely only upon the options for his profits against the movements of the market. Should such a development take place the hedge market would be restricted in its utility to that extent.

Prohibition of Options in Cotton: In view of this, the authorities concerned do not sanction the teji-mandi business in cotton. It is contended however that if futures contracts are permitted there cannot be any objection against option which is also a contract for the purchase or sale of a right exercisable in future. Since the business provides valuable price insurance facilities for traders in actual cotton and limits the risk of the speculator the Wiles Committee in 1930 was obliged to examine in detail and report on the question of a formal recognition of options in cotton. In this connection one of the most important recommendations of the Committee was "that teji-mandi dealings be brought under control by the enforcement of cash premia and regular payment of differences through the clearing house". In compliance with this recommendation, the E.I.C.A. submitted to the Government of Bombay in 1934, amendments of the bye-laws of the association enabling the Board of Directors to control the option business. The Government then consulted various commercial bodies before deciding to give their sanction to them. In 1935, a conference was held at Delhi between the Secretaries of the Commerce and Finance Departments of the Government of India, the President of the E.I.C.A. and the President of the Indian Central Cotton Committee. As a result, the Secretaries of the Commerce and Finance Departments of the Government of India by a demi-official letter to the Secretary, Finance Department of the Government of Bombay, recommended sanction of the bye-laws regarding option business as passed by the E.I.C.A. But the Government's decision thereon was never announced. The business in options was however carried on in an usual manner.

In the meantime a World War II was started in September 1939. In view of the grave situation created by the war which

threatened the stability of the Bombay market, several measures were adopted by the authorities. Among the various steps taken by the E.I.C.A. the most important was the prohibition of all teji-mandi transactions except the annual options maturing on 24th March 1940.¹⁸ This met with the approval of members as in the then existing circumstances when prices began to soar high everybody thought that teji-mandi transactions of shorter duration would cause wider fluctuations and tend to upset the balance of trading or at least disturb the confidence. On 22nd September the Governor of Bombay issued an Ordinance prohibiting all option dealings in cotton throughout the Presidency.¹⁹ Under this Ordinance, options in cotton entered into after that date were declared void. Government explained that the main factor responsible for the violent fluctuations was the option business. The Ordinance bewildered the trade in Bombay as the operators were not prepared for the news in regard to the abolition of the annual options. Government had also in view the introduction of a Bill on more or less the same lines except that options were to be made a penal offence under the new Act. The E.I.C.A. made a strong representation to the Government of Bombay to exempt the annual teji-mandi transactions from the operation of the proposed Act. As the Ordinance was due to expire on the 3rd November, the Bill was published on 24th October, 1939 embodying the same clauses with regard to options. But the Congress Ministry resigned on 1st November and the Bill was not put through the legislature. After its usual life of six weeks, the Ordinance lapsed on November 3, and the option business was renewed in Bombay.

Prices of raw and manufactured jute in India were soaring high and dealers in jute had an opportunity to make money. These war-profits had to be profitably employed somewhere and cotton carried its own investment appeal. A heavy volume of teji-mandi option was entered into particularly by speculators from Calcutta side. An unending spiral of higher and still higher prices was the result. Hence, the Ordinance was enacted and all option dealings including annual teji mandis transactions in cotton were declared void under an Act made by the Governor of Bombay on the 11th December 1939.²⁰ The provisions of the Act also applied to the

¹⁸ Notice issued by the Board of the E.I.C.A. on 15th Sept. 1939

¹⁹ Ordinance II of 1939

²⁰ Act No. XXV of 1939. An Act to provide for Prohibition of options in cotton and for certain other purposes in the Province of Bombay. It was explained in the official communiqué that 'the effect of options is to exaggerate price movements. It happens that at present as a result of option business the upward movement of prices has been exaggerated and prices have risen above parity. But it is possible that during the next few months there may be a reaction and prices may tend to go below parity and in that event options will exaggerate the downward movement with the same violence with which they have forced up prices at present. That will be definitely against the interest of the cultivator. For these reasons, His Excellency considers that it will be in the interests both of the cultivator and of the trade to stop options.'

partially excluded areas in the Province of Bombay. The Act aroused some indignation from the trade.²¹ While the desirability of checking an unhealthy speculation in cotton is recognised by all, opinion on the question of abolishing the practice of option dealings is divided. Some were strongly opposed to its abolition, particularly the annual teji-mandi business and pointed out that the correct remedy to prevent violent fluctuations in cotton prices was to regulate teji-mandi transactions, especially annual options. In consequence, a hair-splitting discussion and a searching controversy took place between the State and the trade. But it was of no avail and the trade had to give way by carrying on the business through the unofficial channels and in an underground manner. On account of the then existing war the trade reconciled and trusted that after the end of the war at least the annual options will be formally revived.

After the end of the war when the Congress Ministry again came in power and issued in September 1946 a questionnaire on 'Cotton', a hope was entertained by the trade that the option business will be given a square deal and the important section of the E.I.C.A. harboured a belief that due recognition will be accorded to their legitimate business in teji-mandi transactions. Obviously this expectation was based on the E.I.C.A.'s emphatic opposition to the Ban on options in the past, as well as on the E.I.C.A.'s strong support to the tej-mandi business since 1930. Contrary to this, the Government of Bombay displayed a different attitude as indicated in a report of the Committee of the Cabinet in which it was recommended that "options in cotton, i.e. teji-mandi transactions should be forbidden . . . and it does not seem to the Committee that trading in options is necessary in the interests of either the grower of cotton or the consumer of cloth or indeed that it is conducive to healthy cotton trade"²² On the close scrutiny of this statement it will become obvious that in the name of a grower and a consumer of cotton the Committee has frustrated all the expectations of the premier trade of India regarding the option business. It seems that the Committee should be convinced about the utility of options. No less an authority than Sir Purshottamdas Thakurdas has written about the usefulness of options in cotton for all concerned in the following words: "Options or teji-mandi transac-

21 "As for the apprehensions that options would exacerbate the downward movement with the same violence, the cotton grower and the trade might inquire why a similar ban on options had not been imposed during the long period of depression. The impression therefore is that the Act aimed at preventing cotton prices from rising. If it be so, it is deplorable and the Board of the F.I.C.A. feel that they must lodge their emphatic protest against the action."—Sir Purshottamdas Thakurdas, *Times of India*, 14th Dec., 1939.

22 Report of the Committee of the Cabinet on the Control of Forward Trading in Cotton in the Bombay Province: April, 1947 p.5

tions have for the past fifty years been a feature of the Bombay Cotton Market. They help the holding and carrying of cotton to later months by bringing into the cotton trade the resources of the small traders and merchants and this mass selling or buying acts as a brake on violent fluctuations in cotton prices. Incidentally this large pooling of the resources of small men also helps to fetch better prices to the cotton grower.²¹ In this connection a further reference may be made to one of the reports published by the Central Agricultural Marketing Department of the Government of India wherein while describing the teji-mandi transactions it is concluded that "on the other hand, properly controlled and long-dated teji-mandi transactions may provide a certain facilities to the genuine operator in covering his risks."²¹ In spite of all these considerations, the Government of Bombay has passed the Act²² of 1947 under which the options or teji-mandi transactions are prohibited and a defaulting party has been made liable to a penalty.

This is rather a strong attitude and a stand taken by the Government. The prohibition of options cannot be calculated to help in any way the cotton grower or the consumer either of cotton or cloth. But it is bound to injure the interest of the trade by confining the business in options to the underground dealings carried out in a closely guarded and properly protected private manner by individuals. One is therefore afraid that this Act is bound to prove most detrimental to our Society as it will encourage unhealthy and undesirable dealings in options by the irresponsible element of the trade to such an extent that the very business will shade into nothing short of gambling in cotton. It will then be very difficult to cope with the situation and curb the illegitimate activities either by a recognised association or by the Government. It is therefore better to revise and reconsider the attitude of the State towards options in cotton before it becomes too late.

6 CONCLUSION

The conclusion that can be drawn from the above discussion is that there seems to be only two alternatives to improve upon the position of options in India, viz, (a) statutory recognition or (b) regulation by the association concerned. Whilst the first proposition will clarify the present situation and add to the strength of their official status, the second will go a long way in reducing

21 Ref. to 'Evolution of the Cotton Trade of Bombay' By Sri Purshottamdas Thakurdas 1941 p.17

21 Ref. to Marketing Series No. 45 'Report on Lax Market and Produce Exchanges in India' - 1943, p.80

22 The Bombay Forward Contracts Control Act 1947

the cause of confusion. It may however be stated that neither of these alternatives will meet the objections raised nor will they remove the inherent weakness of options. We would therefore suggest that the transactions in teji-mandi be recognised officially and regulated as well as effectively controlled by a statute in our country. But in view of the information received by us, it may be said that the recognition should be qualified. Rules may be made to ascertain whether an option is backed by a futures contract or not. In order to restrict a seller's dealings rules may also be framed prescribing the maximum limit of amount and quantity beyond which he cannot sell options on a particular position of a particular contract. Finally, it may also be laid down that only the annual options will be allowed to pass through the clearing house and that options other than the annual or the options of a shorter duration than a year will not be cleared by a member of a recognised association.

CHAPTER XIV

REGULATION OF FUTURES TRADING AND MARKETS

DURING the world war of 1914-18, prices of cotton in India were regulated under an emergency measure and the problem of permanent legislation was held in abeyance for a time. In recent years, legislative activity has been concerned with regulation and control of futures trading and markets so that practices detrimental to the trade may be eliminated. In fact, futures contracts made in an ordinary way upon an organised market or exchange are legalised, while prohibiting those created purely to trade in price differences. The law rests content with the intention to fulfil contracts by actual delivery. It should, however, be said that legal regulations have been enacted frequently by the failure of exchanges to correct conditions which lay within their power to remedy.

The question of regulating the cotton futures trading and markets in India is a matter of acute controversy. Since the Government of India constituted the Cotton Contracts Committee in 1918, under the Defence of India Act, to the present day, it has been a matter of keen discussion both in and out of the legislature and the exchanges. So far as the Bombay market is concerned, this problem is of fundamental importance. It will therefore be our main concern in this chapter to deal with the problem of regulation in the light of the prevailing system in other countries.

1. THE CASE FOR REGULATION

Reasons why Regulation is Necessary: It is said that trading in futures upon an organised market is conceived to distribute in an orderly way cotton from the field to the factory. From an individual point of view the production and distribution of commodities are carried on with a view to their exchange. The tests of perfection of an organisation of trade are the promptness with which such transfer is effected and the accuracy with which it is carried out. It is by a due appreciation of these facts that one comes to realise the importance of futures trading and markets. The machinery of cotton marketing in use today is regarded as most extensive and complex, in as much as, orders come from many sources and operators are scattered all the world over. In fact, the entire cotton trade of the world centres around the futures markets.

In the absence of a futures market an exporter will not be able to sell ahead to the consumer in Europe and the Far East. A dealer will not be able to sell any forward delivery cotton. A financier will not consider it safe to advance loans to a cotton dealer

without a heavy margin. With a reduced buying power on account of credit restrictions and by the disappearance of price protection those engaged in the marketing process will be forced to operate on wider margins; paying less to the producers and charging more to the consumers. It may further be pointed out that those commodities which lack the assistance of a futures market suffer from many disadvantages. For example, the margin between the cost of such raw commodity, and the sale price of the finished article tends to be greater. It seems therefore, that all intermediate links take less out of the product when there is in the centre a properly organised futures market to act as shock-absorber. Because a futures market provides a prompt buyer to a seller and vice versa at a reasonable price under normal circumstances, it is of great importance to the growers, factory-owners, middlemen, merchants, exporters, importers and manufacturers. A futures market, under the present system of marketing an agricultural produce like cotton is therefore a sheer necessity for its orderly marketing in the world.¹

However important an economic organisation like a commodity futures market may be, its shortcomings should never be lost sight of, for the reason that after all, it is also a human institution and as such is subject to man made factors. A futures market is susceptible to many activities, such as, squeezes, corners, manipulation, bear-raids, bull-raids, etc. Though without a futures market, cotton trade cannot now be thought of, these elements demand due consideration. The point is that dealings made on a futures market are liable to be abused by unscrupulous men. It is likely that to make money people go to any length as in all other trades and professions in the world. It should be admitted that these activities are certainly undesirable elements in any well-organised system of marketing, since, they tend to exaggerate the price movements and in turn affect the agriculturists, merchants and manufacturers. They tend to produce adverse effects on the trade and industry. In short, at times, these elements make the market unhealthy by becoming the cause of violent price fluctuations and by rendering the futures contract of little use both as a medium of hedging and as an indicator of the price level. Hence, such activities should be controlled and properly regulated.

The Scope of Regulation: It is gratifying to note in this connection that the modern tendency is to restrict the undesirable activities by strict supervision on the part of exchange authorities.² As a matter of fact the exchange authorities particularly in India have not the sufficient power to control and regulate the futures trading and markets. Reasons for this are not far to seek. There is no comprehensive piece of legislation empowering the Indian exchanges to enforce strict rules and regulations on the trade. In order

1 Reply to the Questionnaire issued by us

2 Ref. to chapter on 'Speculation'

to control undesirable speculative activities on a futures market it is imperative that there should be a restrictive measure of legislation. It may be suggested that harmful activities on a futures market can be brought under control by enforcing unity of control in the trade, limiting hours of business, and restricting certain other matters, such as price fluctuations for a given day, limiting trading position of an individual, etc. This has been accomplished, as we shall see in the following section, by most of the foreign leading markets and the exchange authorities have taken steps to improve the character of trading. But in India much remains to be desired and achieved in this direction. With a view to check the excessive speculation it is necessary that the Act should empower the exchange authorities in India for adopting the following measures:

- (i) The limitation of the price fluctuations per day.
- (ii) The limitation on the trading of individuals to the extent of net long or short position of 50,000 60,000 bales from the last clearing; this should not apply to hedge sales or purchases.
- (iii) The publication of such figures as to enlighten the public at large in matters of volume of transactions and other useful as well as relevant information at least once a week.
- (iv) Enforcing the system of daily settlement and margin money.

2. REGULATION IN OTHER COUNTRIES

In most of the leading countries, organised produce markets have to fulfil rigid rules and regulations prescribed by the State. Some of these countries, viz., the U.S.A., Germany and Japan may be taken for our purpose.

U.S.A.: The U.S.A. claim and rightly possess the largest and most efficiently organised commodity markets in the world. For more than 50 years there has been in progress a gradual but steadily increasing extension in the types of Federal legislation affecting and in greater or less degree governing the conduct of business. The most conspicuous illustration of this is the U.S. Cotton Futures Act. The gist of the Act is this. It imposed generally on all contracts for future delivery made on any organised market a tax of 2 cents per each lb. of cotton involved. It then exempted from the tax, contracts that complied with its conditions which aimed at correcting the evils¹ of futures trading. Lastly, it provided machinery for carrying the scheme into effect.

¹ The abuses on exchanges arose from five conditions (i) multiplicity of standards, (ii) a system of fixed differences, (iii) delivery of low grade cotton, (iv) the failure of tenders, and (v) the 'performance' delivery practice. Service and Regulatory Announcements, No. 5, U.S. Dept of Agriculture, 1915.

When the statute had been obeyed in this regard, the contract was freed from taxation.⁴

The Act gave vast powers to the Secretary of Agriculture in almost all matters connected with the dealings in cotton futures. For instance, he was authorised to prescribe regulations for carrying out the purpose of the Act, to designate spot markets, standards, grades, etc. This intervention of Government agency was welcomed by the trade in general. However, it did not satisfy those who desired a comprehensive type of measure, because, it did not aim at broadly regulating or supervising the trading practice of members. Hence, after sometime, a bill suggesting drastic measures was introduced in the Congress in April 1930.⁵ The bill was opposed by the Federal Farm Board who approved of the regulatory legislation but expressed that the present measure would suppress futures trading in cotton and grain.⁶ It was suggested by the Board that improvements in the present system would be accomplished if the exchanges were placed under proper supervision and control of the U.S. Department of Agriculture.

In the light of this suggestion the Commodity Exchange Act was passed in 1936 bringing under the State supervision transactions for future delivery in cotton, wheat, etc. The new Act is a supplement to the Cotton Futures Act, 1916 and Grain Futures Act, 1922.

The principal important conditions of the Act are:⁷

1. Markets which wish to conduct transactions for futures delivery must be so designated by the Secretary of Agriculture. It is unlawful for transactions to be made for future delivery except through a regularly designated market.
2. Records of all transactions must be kept for a period of at least three years giving all terms of the transactions.

The designated market must allow the Secretary inspection of all its records or minutes of official bodies or committees of the market.

4. The Commodity Exchange Commission may fix limitations both on the amount of speculative trading that any person

1 The exemption conditions are contained in Sections 5 & 10 and contracts made in compliance therewith are called \$.5 or 'base' contracts and \$.10 or 'specie' contracts."

5 Senate Bill No. 1129 entitled "To prevent the sale of cotton and grain on future markets."

6 "We are fearful that so drastic a change would completely upset the marketing machinery although we realise the need for improvement." Correspondence between the Senate Committee and the F. I. Board, April 1930; As reproduced in the Report of the Special Committee of the Chamber of Commerce of the U.S.A. 1930, p.39.

7 Commodity Year 1939 Book, U.S.A., p.79

may do in one day and also upon the speculative net position, long or short, that may be had by any one person, at any one time.⁸ The Commission is given wide discretion in fixing trade limits. It may also fix different trading limits for 'spread' and 'straddle' operations.

Commission merchants trading in regulated commodities must be registered, the annual cost of which is 10 dollars. The registration must be accompanied by financial statements which are carefully scrutinised by the Commission. Registrations expire on December 31st of each year. Thus a new registration and new report are required each year.

It will be observed that under this Act the Commission is placed in a position to obtain a great amount of information which was not obtainable under the previous laws.

Germany: In Germany, the principal exchanges and the majority of the small ones are modelled on the pattern of the Berlin Exchange the organisation of which was prescribed by a Government decree in 1886. It was provided that the establishment of an exchange must be approved by the State. The governing body of the Berlin Exchange is appointed by the corporate body of the merchants of the city and has disciplinary powers for the conduct of the exchange.⁹ The State exercises supervision over exchanges, particularly in matters of clearing associations. Commissioners are appointed as state officials charged with supervising the business conduct of the exchange and the observance of the promulgated laws and administrative measures. They may also supervise directly the fixing of price quotations on the part of professional quotation brokers. Trading permits are necessary for all German exchange.

Japan: The Act of 1893 was passed to recognise the exchanges in Japan. At the time of this legislation, exchanges were only seven.¹⁰ In 1897, the number was reduced from seven to five and by 1916, the exchanges became extinct. Hence, in 1922, the Act was passed which brought five new exchanges into existence.¹¹ The spirit of the law now in force ordains that the association will not be granted permission for the establishment of exchanges unless it is centrally or mutually organised. Another important provision is that there shall be no more than one exchange in a given district in respect of a given object of transaction.

8 It is important to note that the trading limitations do not apply to bona fide hedging transactions nor to the trading of futures commission merchant and floor brokers, unless such trading is for their own account.

9 Commodity Exchanges in Germany: Hans Hirschstein: *Annals of The American Academy of Political and Social Science*: 1931 May, Vol. No. 155, p.208.

10 Commodity Exchange in Japan: Zensuku Sano S.D., *Ibid*, p.225.

11 The Exchange Act of 1922, *Ibid*, p.226.

3. HISTORY OF REGULATION IN INDIA

During the first two decades of the 20th century, several bodies cropped up for the protection of the various small branches of the trade.¹² In any change in rules and regulations or the various customs of the trade in Bombay, these bodies had a say. Until almost the end of the year 1917 the position was more or less intolerable and nothing, but legislation could mend it. In June 1918, under the Defence of India Act, the Cotton Contracts Control Committee, under the chairmanship of Mr. (now Sir) G. Wiles was appointed by Government to control the trade in Bombay. The Committee succeeded in making the best of the situation then existing.

Act of 1919: As the Committee was constituted as a temporary measure, in November 1918, a bill providing for the control of dealings in cotton by the Bombay Cotton Contracts Board was introduced in the Legislative Council by the Government of Bombay. It followed the rules previously laid down in connection with forward contracts. On moving its first reading, the Hon'ble Mr. G. Carmichael observed that, "though the Bombay Cotton Market handles as much cotton as any other in the world, it has long been recognised that the regulations under which its operations were carried on were seriously defective and conditions were constantly recurring which reacted unfavourably on the genuine trade in cotton and on business generally in Bombay. Various suggestions for reform have been made from time to time but the primary step to be taken, namely, the constitution of one central body of control, always proved insuperable."¹³ The real trouble always thus centered around the setting up of a central authority to control the trade. Hence, this bill may be said to be the first genuine effort of Government regarding the unification of the Indian Cotton Trade.¹⁴ The Council accepted, as did the trade, the main principle of the bill that there should be a central controlling body to regulate the trade in cotton. The bill came into force as the Bombay Cotton Contracts Control (War Provision) Act, 1919.

The Act being a war measure its repeal was moved in 1921 and passed in 1922. Accordingly, the Cotton Contracts Board was to cease functioning from 1st June 1922. The Board as a

12 "There are at present in Bombay seven distinct bodies representing different branches of the cotton trade. They are (1) The Bombay Cotton Trade Association, (2) The Bombay Cotton Exchange, (3) The Bombay Millowners' Association, (4) The Cotton Brokers' Association, (5) The Marwari Chamber of Commerce, (6) The Cotton Merchants and Miscellaneous Association, and (7) The Japanese Cotton Spinner's Association. Report of the Indian Cotton Committee, 1919, p.205.

13 Bombay Legislative Council Debates, 1918, Vol. LXI; p.975.

14 (1) "I have absolutely no hesitation in asserting that the bill is a right step in the right direction for the amelioration of the Cotton Trade, not only of this city, nor of this Presidency only, but of the whole of India." Sir Purshotamdas Thakurdas, Ibid, p.798.

central body controlled the trade for more than three years from January 1919 to May 1922.

It was during the regime of this Board that Mackenna Committee appointed by the Government of India in 1917 made out a case for the establishment of a central cotton Trade Association in Bombay under a Royal Charter similar to the Liverpool Cotton Trade Association.¹⁵ The report of the Committee gave an expression to the view that it was a matter of urgent importance that the Bombay Cotton market should be organised on sound and healthy lines. Mr. Mackenna, the president and Mr. (now Sir) N. N. Wadia, a member of the Committee interviewed the trade as to the lines on which reforms should proceed. It was unanimously agreed that immediate action was necessary to create a central controlling body. At the same time, it was duly recognised that the trade itself could not then undertake its formation. The Government of India in turn authorised Mr. Wadia to draw up in consultation with the Directors of the Liverpool Cotton Association, a scheme for the Cotton Association in Bombay.¹⁶

The main object of the reform was, of course, to control speculation which was looming large during the war time. The authorities admitted that while speculation could not be eliminated altogether, the aim should be so to regulate the market as to secure the interests of bona fide traders and to discourage speculation inimical to those interests. The measures necessary to secure this end involved the problem of regulation of futures trading. Government expressed the view that as in Liverpool and New York, "It is eminently desirable that a central cotton association should be established in Bombay." A confirmed belief both of the State and trade was that it would be necessary to accord the said association, when formed, some measure of statutory recognition. The Government of India in due course invited the Cotton Contracts Board to get into touch with the various sections of the trade with a view to form a single association representing all the interests. They gave an assurance that should such an association be formed, they would introduce legislation giving it the requisite powers of control.¹⁷

15 "One central Association to be known as the East India Cotton Association should take place of the seven distinct bodies which at present control the cotton trade in Bombay." Report of the Indian Cotton Committee, 1919, p 210

Govt of India Commerce Dept. Communique No. 6505, 25.9.20 (Better known as Jones' letter)

17 "It is necessary (as it will probably be) to include in the bill a provision to the effect that no contract for the future delivery of cotton shall be enforceable in any court of law in British India unless drawn up in accordance with the rules framed on this behalf by the proposed Central Association, there is no alternative but to undertake the necessary legislation in the Indian Legislative Council. It is also evident that even though the Association will presumably confine its activities mainly to the Bombay city its operations will affect the cotton Trade throughout India and for this reason also, the Government of India think legislation must be undertaken in their own Council." Ibid.

Act of 1922: Now the trade began to think of formulating a permanent single commercial association for its regulation. They were successful in forming one central association which was named as suggested by the Mackenna Committee, the "E.I.C.A." This body started its work from May 1922 as a private institution without statutory recognition. It should, however, be mentioned here that the association did not succeed in enlisting the unanimous co-operation of all the sections of the trade. The Millowners' Association opposed its constitution and withheld their approval by refusing to join its membership. This interrupted its progress and the organisation began to experience difficulties in its work. In fact, it was impossible for it to carry on without official recognition. A condition precedent to such recognition was that the central body should be representative of all the important sections of the trade. Experience gained during the regime of the Cotton Contracts Board had proved that no voluntary central association would hope to control the trade for any length of time without legislative authority behind it. The Millowners' Association had therefore to be reconciled and their co-operation won by amending the constitution of the E.I.C.A. before asking Government for a Royal Charter.

The association then represented to Government the urgent necessity of passing the Act conferring upon the E.I.C.A., (a) statutory powers to enable them to regulate the trade and (b) sanctioning the administrative machinery contained in the Articles of Association. On 25th July 1922, a bill legalising the establishment of the E.I.C.A. and giving most of the powers exercised by the Cotton Contracts Board was introduced in the Council by Government.¹⁸ This was a natural complement of what the Government undertook in 1919. The Council passed the bill and it came immediately in force as the Bombay Cotton Contracts Act, 1922.¹⁹

Growth of a Rival Body to the E.I.C.A.: For the first three years, the E.I.C.A. had to face some opposition particularly from small traders. But no one tried to oppose the association thinking that the Act of 1922 would be repealed on its expiration. Contrary to this expectation, the life of the Act was extended by Government for a term of three years. On seeing that there was no hope to repealing the Act, the growing dissatisfaction of the traders took altogether a new turn. The Act was scrutinised in all its aspects by the opponents who noticed that there was a scope for running a similar organisation on independent lines. Section 5 of the Act was construed as having the effect of unenforceability at courts, of contracts made under any other body except the

¹⁸ Bill No. XIII of 1922. "A bill to provide for the regulations and control of transactions in cotton in the Presidency of Bombay."

¹⁹ Bombay Act No XIV of 1922. Its application was however restricted to the city of Bombay only.

E.I.C.A., since, it laid down that any contract contravening the bye-laws of the E.I.C.A. was simply void. It did not say anything further than this. Ordinarily this was enough to prohibit the organisation of a rival institution, for, its contracts would be void and a businessman could not afford to enter into such transactions. But the small traders and merchants found a way out by making a distinction between void and illegal contracts. This led to the formation of a new association in 1925 under the style of "Shri Mahajan Association." In fact, the formation of the Mahajan was the natural outcome of a loop-hole in section 5 of the Act of 1922. Such a contingency as the formation of any rival organisation ought to have been visualised and provided for, by making all contracts contravening the bye-laws of the E.I.C.A. not only void but also illegal or punishable at law. The E.I.C.A. registered its protest against the establishment of a new body but to no purpose.

In 1930, at the instance of the trade, Government consulted the various interests and decided to appoint a committee to make recommendations for the amendment of the Act.²⁰ The committee was appointed consisting of an official chairman Mr. (now Sir) G. Wiles and 13 other representatives of the trade including those of agriculturists. The committee among other matters examined the problem of control of the trade in Bombay. The Act of 1922 in their opinion was defective to the extent that it did not provide for the exclusion of other associations being formed, because, the provision of contracts that contravened the bye-laws of the E.I.C.A. was not effective in suppressing void transactions. In view of this state of affairs, the Wiles Committee recommended that:

"A single association shall be given control of dealings and that the passing of contracts contravening bye-laws drawn up by the Association and sanctioned by Government shall be made an offence punishable with fine, that all forward business shall be done through members of the Association and that the Act shall prevent the formation of other associations for the control of forward business."²¹

Bill of 1931: A bill was introduced on these lines in the Council on 29th July 1931.²² It followed the general lines of the Act of 1922 except that it aimed at restricting futures dealings to the agency of a member of the E.I.C.A. and making illegal the passing of other futures contracts. It was laid down that any contract not confirming to the rules of the E.I.C.A. should be void and any person entering into such contracts shall upon conviction be liable

²⁰ Pres. Note: 17th April 1930; Government of Bombay. The operation of the Act of 1922 was extended until Aug. 31st 1931.

²¹ Report of the Cotton Contracts Act Committee, 1930, p 18

²² Bill No.XX of 1931.

for each such offence to a fine not exceeding Rs. 1,000.²¹ The purpose of the bill was to give a death blow to an unrecognised body like the Mahajan Association.

The debates that followed in the Council, however, indicated the direction in which the wind was blowing. The bill was regarded as a State measure of control over the cotton trade and opposed accordingly.²² The point at issue was whether there should be unity of control or not. The principle of the bill was to bring about the unity of control over the trade. It was agreed on all hands that a control over futures trading was necessary, and regulation of speculation in cotton contracts was of paramount importance. The point to be discussed was whether that control should be vested in one body only. Unfortunately for the trade, the principle was misinterpreted as one of giving monopolistic control to the E.I.C.A. at the cost of small traders. Serious allegations were made against the working of the E.I.C.A.²³ It was advanced that the control should not be vested in a single body like the E.I.C.A. but more than one association should be allowed to have a say in this matter.

The main agitation against the bill came from the Mahajan, since, it was a question of life and death for them. They vehemently carried on a big campaign against the bill by issuing appeals after appeals and freely distributing pamphlets to the public in general and Councillors in particular. In these appeals and pamphlets they tried to point out the weak points of the E.I.C.A. and urged the necessity of maintaining their organisation. Somehow, most of the Councillors representing the mofussil strongly opposed the bill to the extent that an amendment negating the very principle and purpose of the bill was moved and carried by 44 against 41.²⁴ The amendment referred to the term 'association.' It stated that the word 'association' should mean the E.I.C.A. or any other association. As a result, the mover of the bill had to withdraw it. Thus, the bill which should have really ameliorated the position of the trade by giving effective unitary control to the E.I.C.A. was lost and the system of multiple control continued to exist as before.

Act of 1932: In September 1932 Government introduced in the Legislative Council a fresh bill. It provided for the statutory

21 Section 6 (2), Ibid.

22 'I am against a control. Sir Sir I say that there should be no control and nobody should be allowed to have any control' Ra. Bahadur S. K. Bole, B. L. C. Debates Vol. 31, 1931 pp 567-8

23 'Then Sir, the members of this E.I.C.A. resort to other tactics with a view to depress prices, they combine to sell and sell and sell. The prices in Bombay are brought down by a peculiar sort of combine in which the sellers sell, buyers sell, the exporters sell, the importers sell the brokers sell.' Dr M. K. Dixit. Ibid. p 605

24 It is very difficult to say that this was the result of the Mahajan's campaign alone.

recognition of the E.I.C.A. or any other association it at any time it should be found desirable to do so and also enabled Government to withdraw such recognition from a recognised institution under the Act. Further, it vested Government with powers to supersede at any time, if necessary, the Board of Directors of a recognised body. Reasons for these innovations may best be explained by the then existing circumstances in Bombay. In India, it was the time of the Civil Disobedience movement launched by the Indian National Congress against the Government of India. Those were the days of Hartals and non-cooperation everywhere in every sphere. The cotton trade in Bombay was no exception to this. The result was an embarrassment of the English traders. No body could help the situation. The Board of the E.I.C.A. was unable to restore normality in spite of their passing so many resolutions to overcome the abnormal circumstances, as the trade in general was reluctant to cooperate with foreigners. In consequence, there arose an interruption and dead-lock for foreigners to carry on peacefully. They approached the local Government to set the matter right who in turn asked the E.I.C.A. to put their own house in order. Because the Board failed to restore the order, Government introduced the bill and took the extreme view of withdrawing the charter given to the E.I.C.A. in case of emergency. It will be noticed that the bill was the result rather of a political countermove on the part of Government than a mere economic arrangement.¹⁷ The E.I.C.A. registered a vigorous protest against the bill by passing a resolution¹⁸ to the effect that it was unacceptable to them, because, "there was no provision for unitary control."

In spite of this, the bill was pursued on the ground that an improved legislation than that of 1922 was required to set right the cotton trade. The Act of 1925 under which the Native Share and Stock Brokers' Association works as an officially recognised body with power to Government to withdraw its recognition should the affairs of the Association be mismanaged, was regarded as an ideal measure for the cotton mills.¹⁹ In fact, Government wanted by this bill to revise its paternal attitude towards the E.I.C.A. and to recognise, in case of necessity, a body formed by a particular section of the trade who might be able to win over their approval.

In the course of debates on the bill, an amendment to clause 4 was moved to the effect that if one or more associations came

¹⁷ "Government are really going to introduce politics into business by means of a statute. Will not this emergency be over shortly? Do you think this hartal and boycott will go on for ever?" Rao Bahadur B. R. Nankar, B. C. Debates, Vol. 35, 1932, p. 73.

¹⁸ Annual report of the F.I.C.A. for the years 1931-32.

¹⁹ It should however be noted that the Act cannot be said to be an ideal one nor can it be regarded as aiming at unity of control since under the very Act there exist more than one body in Bombay to control and regulate the business in Stock and Securities.

forward with the requirements duly fulfilled, they should be recognised by Government. This time, the amendment was, however, negatived on the ground that in the interests of the cotton traders and growers there should be unity of control. It was stated that Government was not in favour of dual or multiple control.³⁰ The bill was then read a third time and it became the Bombay Act No. IV of 1932 providing for the "Better regulation and control of transactions in cotton in Bombay

By enacting this piece of legislation Government established their attitude towards the EICA. Of course, the association was given due recognition under the Act and the principle of unitary control by a single body was accepted. But the alternatives of withholding the given recognition and recognising another body or superseding the recognised body, in case of an emergency, by an official body were confirmed by the Act of 1932. The principle on which the previous bill of 1931 was thrown out by the Council was duly recognised and accepted in a modified way in the sense that contracts contravening the bye-laws of a recognised body were not made illegal or punishable at law which the previous bill sought to effect.

Bill of 1935: Since no penal clause was embodied in this Act there was nothing to prevent the Mahajan or any other body to function except that its contracts were unenforceable at courts in British India.³¹ The Mahajan therefore continued to function as usual. The trade in general resolved to put an end to this duality of control. Hence, a bill was introduced in November 1935, to amend the Bombay Cotton Contracts Act No. IV of 1932.³² This bill was introduced on private initiative and not by Government. It aimed at giving the control to the EICA by making the contracts contravening its bye-laws not only void but also illegal and punishable at law.³³ The Mahajan realised the strength of this measure and presented to Government a memorandum accepting the principle of unitary control in futures trading. In the course of debates in 1936 the bill was, however, deferred to the next session and was ultimately withdrawn.³⁴

30 The Hon'ble Sir Ghulam Hussain said that 'If we are to recognise six seven or eight associations then there will be absolutely no control in the market. Every civilised country has unitary control.' BIC Debates Vol 55 1932 p.205

31 In 1932 another association under the style of the 'Indian Cotton Exchange' was formed in Bombay for the purpose of carrying on futures trading in cotton. For one or the other reason traders did not rally under its auspices in a large number. Before its winding up on account of litigation no heavy transactions were put in.

32 Bill No. XVII of 1935

33 There should be efficient unitary control in the interest of forward cotton trade in Bombay city. That has prompted me to bring in this measure.' Sardar Raj Bahadur B. R. Naik BIC Debates 1936 Vol 44, p.1412

34 'The bill met with opposition from certain quarters and the Government of Bombay were unwilling to give it the support which might have ensured its smooth passage through the Assembly.' Sir Purshottamji Thakurdas Evolution of the Cotton Trade of Bombay Indian Textile Journal Jan issue 1941, Jubilee Number

Act of 1939: In 1937, when the Congress Government came in power the E.I.C.A. once again rose to the occasion and approached the National Government for effecting unitary control over the premier trade of Bombay. They promised to go into details of the problem and invited the views of all the interests concerned on the question of making illegal all futures contracts except those made through a recognised association. They appreciated the point that the Act of 1932 had failed to achieve its objects of unitary control and eliminate excessive speculation. It was realised that a penalty clause was closely interrelated to the principle of effective unitary control since one could not exist without the other, and that penalty would further assist in checking undue and inordinate speculation which the State sought to bring about. In order to bring about a lasting compromise between the two rival bodies in Bombay, the Congress Government therefore suggested the following proposals as a fair compromise between the E.I.C.A. and the Mahajan: (i) that a ring be created for the smaller trader to operate with a unit of 20 bales. (ii) That operations in the small ring be restricted to trading to a maximum limit of 2,000 bales for each settlement. (iii) That members operating in the small ring be required to pay a deposit of Rs. 3,000. (iv) That members trading in the small ring be allowed to select two representatives to the Board of the E.I.C.A. Government then requested both the associations to meet and adjust their differences even if these proposals involved modifications to some extent. Consequently a detailed discussion took place between the two bodies and an agreement on the issue of amalgamation was reached in June 1939. Accordingly a bill was to be introduced in the Legislature. In the meanwhile, there started the World War II in September 1939 and the Congress Government resigned. Hence, this bill could not be taken up for want of time. As a result, the former 'status quo' was maintained in the cotton trade of Bombay.

But the War created a grave situation and the Governor of Bombay had to issue an Ordinance in September 1939 prohibiting all options in cotton throughout the Presidency. This was followed by a publication of a bill in October 1939 embodying the main clauses of the Ordinance.¹¹ In December 1939 this Ordinance was enacted and all option dealings were declared as void under the Act No. XXV of 1939 made by the Governor of Bombay as "An Act to provide for the prohibition of options in cotton and for certain other purposes in the Province of Bombay. Although this Act prohibited the teji-mandi transactions, it did not affect the forward trading in cotton. The cotton associations in Bombay and in the Presidency were therefore functioning in their normal manner till the middle of the year 1943. In April 1943, an Ordinance, under the Defence of India Rules, imposing a ban on

¹¹ Ref. to chapter on "Teji-mandi" for details.

"Options and forward contracts in the new cotton crop" was issued by the Government of India and its application was made to the whole of British India.³⁰ On 18th May 1943 Government issued a fresh communique making the ban applicable to forward trading even in the current crop of cotton and only 48 hours were given for the voluntary liquidation of all transactions before 20th May 1943 under "the Cotton (forward contracts in current crop prohibition) Order, 1943." Under the Defence of India Rules the forward trading in cotton remained closed in India for about five months from the third week of May to the last week of October 1943. On 28th October 1943 the transactions in futures trading were allowed only in Bombay and then in Karachi under the aegis of the E.I.C.A. and the K.C.A. with certain terms, conditions, restrictions and safeguards subjects to their annual revision and renewal.³⁷

Cabinet Committee's Report on the Control of Forward Trading in Cotton: While the Second World War came to an end in the middle of August 1945, out of the various orders passed by the Government of India, under the Defence of India Rules, the relevant Orders were continued in force in this Province by "The Essential Commodities and Cattle (Control) Act of 1946." This was a provincial Act under the provisions of which cotton was declared an essential commodity. Thus the Act of 1939 and the Act of 1946 were the temporary measures which should lapse after a time unless duly re-enacted.

Now, the problem before the Congress Ministry which came in power for the second time in April 1946 was therefore how to switch over from the war-time arrangement and regulation of the cotton trade and market both in the Bombay city and the Presidency to a permanent peace-time control over the trade in general and forward trading in cotton in particular. As a first step in this direction the Congress Government issued on 24th September 1946 a cotton questionnaire along with a Press Note in which it was stated that "The Government of Bombay has under consideration the question of legislating for the further control and regulation of the cotton trade in the Province, in particular forward trading in cotton." All persons and associations interested in the cotton trade were requested by Government to send in their replies to the questionnaire on or before 31st October 1946. With a view to elicit the views of the selected individuals and associations on the subject the Cabinet's Committee composed of Sjt. V. L. Mehta, Minister for Finance, Sjt. M. R. Desai, Minister for Revenue, and Sjt. M. P. Patil, Minister for Agriculture arranged for the interviews during the months of December 1946 and January 1947 and recorded their oral evidence on the problem of regulation and control of the cotton trade. A report of the Cabinet's Com-

³⁶ Press Note Govt of India, 30th April, 1943

³⁷ Ref. to chapter on "Cotton Prices" for details.

mittee was then published in April 1947 by the Government of Bombay.

Broadly speaking, this report dealt with the three main issues, viz., control by Government, constitution of a recognised association and composition of the system of hedge contract. No doubt, it made a sincere and honest effort to meet the multifarious requirements of the cotton trade. The Committee made the following recommendations: (1) that the measure should be extended to the whole Province, (2) that so far as the hedge trading is concerned there should be only one recognised association for the whole Province, namely, the E.I.C.A., (3) that forward trading outside Bombay may be permitted and that normally no region (Gujarat, Maharastra and Karnatak) need have more than one recognised association, (4) that Government should take power to impose bye-laws in all matters, (5) that contracts not in accordance with the bye-laws should not be merely void but they should be made illegal and the parties thereto should be rendered liable to punishment, (6) that it should be a penal offence for any person to organise, assist in organising or be a member of an unrecognised association, (7) that Government should take power to nominate the President or one or more members of the Board of any recognised association, and that it should also have power to supersede the entire Board including the President of any recognised association, (8) that the present system of directors being chosen to represent different interests should continue but that the election should be by the general body as a whole and not by panels thereof, (9) that two of the six seats now reserved for brokers should be reduced and a corresponding number be reserved for Associate members, (10) that in addition to the three persons nominated by the I.C.C.C. four persons should be nominated by Government to effectively safeguard growers' interests but that they need not necessarily be growers, (11) that there should be no provision for transfer of membership and no limit to the admission of new members either Ordinary or Associate, (12) that the Associate members should be allowed to elect members to the general body in the following manner: for the first 100 Associate members, 5 members; for every additional 50 Associate members or part of 50, there should be 1 member; provided however that the total number of such members elected to the general body does not exceed 20, (13) that the Survey and Appeal Committees should be enlarged as follows: Survey Committee from 25 to 50, Appeal Committee from 16 to 30, Super-appeal Committee from 3 to 5, (14) that the Association should make more use of the machine tests at the stage of appeal, (15) that smaller unit (than the 50-bale unit) should not be allowed, and that there should not be a general reduction in the membership fee of the E.I.C.A. nor a separate class of membership for small trades and that it is not necessary to give separate consideration to the question of amalgamation of the Shri Mahajan association with the E.I.C.A., (16)

that options in cotton, i.e. teji-mandi transactions should be forbidden, and (17) that the present time is not opportune for considering a change in the major basis of the contract nor any radical alteration in the present contract is necessary.

These recommendations were rightly and wrongly criticised by a fairly large number of individuals and important institutions during the next few months. In consequence, the Government accepted the above recommendations with certain modifications and amendments, in August 1947. Particularly the desirability of affording some facilities to the members of the Mahajan association was strongly urged upon the Government by several Trade Associations. The Government therefore had to decide that the facility should take the form of the creation of a new class (temporary) of membership which will, on the expiry of the temporary period and on further conditions to be then prescribed, be absorbed in one of the regular classes of membership of the E.I.C.A. The details laid down by the Government in this connection were as follows:¹⁵ (1) The E.I.C.A. will be requested to create a class of new Special Associate members (temporary), which will be terminable on August 31, 1950. (2) Only such persons will be eligible for admission to this class as have continued to hold a membership card of the Shree Mahajan Association from a date prior to May 1, 1947. (3) Every member of this class will pay a deposit of Rs. 5,000 and an annual subscription of Rs. 200. (4) The trading rights of such member will be the same as those of a full member of the E.I.C.A., subject to the condition that in the event of any party asking for either a havala or a deposit from a member of this class in respect of any transaction, he will forthwith give the havala of a full member of the E.I.C.A. or pay such deposit; and subject further to the number of permits admissible to a member of this class being such as may be decided by the Government in consultation with the E.I.C.A. (5) The voting rights of such member will be the same as those of an associate member of the E.I.C.A., Associate and Special Associate members of the E.I.C.A. including new Special Associate members may be allowed to elect representatives to the general body up to nine per cent of the total strength of such members. (6) The Government will in due course and in any case not later than May 31, 1950, review the position and decide in consultation with the E.I.C.A. (a) whether this special class should be continued beyond August 31, 1950 and if so for what period and on what further conditions and (b) if it is not to be so continued, whether any facilities should be given for its absorption in one or more of the classes of membership of the E.I.C.A. and if so, what facilities. Accordingly the constitution of the E.I.C.A. was reconstructed from 1st January 1948.

The Bombay Forward Contracts Control Act, 1947: On the 6th September 1947, a Bill based mainly on the Cabinet Com-

¹⁵ Govt. of Bombay, Press Note dated 9-8-1947

mittee's recommendations with the modifications inserted by the Government was published in the Bombay Government Gazette.¹⁰ On 25th September 1947 this Bill was presented to the Bombay Legislative Assembly by the Congress Ministry. While introducing the Bill Sjt. V. L. Mehta, Minister for Finance, stated that "The complaint has been made that such control as Government exercises over the cotton and Stock markets under the Bombay Cotton Contracts Act, 1932 and the Bombay Securities Contracts Control Act, 1925 has proved ineffective. Forward trading takes place outside recognised associations and in a manner which is detrimental to genuine trade interests. This Bill while consolidating the present law regarding control of forward markets also incorporates provisions on the lines recommended by the Cabinet Committee for tightening up Government control over such markets." The debate that followed on the Bill indicated diametrically opposite views held by the different sections of the house. One shade of opinion demanded for the total abolition of forward markets while the other school of thought advocated for the abolition of the penalty and superseding clauses from the Bill. With a view to bridge over these divergent views, the Bill was referred to the Select Committee which was asked to submit its report in the middle of October 1947. The Bill was then read in the modified form second and third time. In due course it received the sanction of the authorities and became "The Bombay Forward Contracts Control Act, 1947."

This Act is now made applicable to the whole Province of Bombay. Secondly, only recognised associations are allowed to conduct forward trading in cotton and a penalty clause is inserted for unrecognised bodies to be set up or conducted in the Province. Thirdly, options are made illegal under this Act in the Presidency. Fourthly, Government is vested with the powers of recognising associations, withdrawing recognitions, superseding Board of a recognised association or its President or one or more members of its Board as and when Government deems it fit. It will be observed that this is a very wide, general and comprehensive Act under which cotton is only one of the commodities dealt with. This Act may therefore be compared with the Commodity Exchanges Act, 1936 of the U.S.A. The Act however suffers from certain defects and limitations which may be noted here. It makes no provision for the publication of useful data, facts, figures and periodical statements by the forward markets which may be quite interesting, instructive and useful to the trade as well as to the general public. It prescribes no limits on individual trading or speculative position on a forward market for a given settlement. It does not make it compulsory for a member of a recognised association to hold a licence issued every year by the Government

¹⁰ A Bill No. XLII of 1947: A Bill to provide for the regulation and control of forward contracts, for prohibition of options and for certain other matters in the Province of Bombay.

like Bombay, Ahmedabad, etc., and contracts contravening the bye-laws of such a body in each city or district or place should be made illegal and punishable at law. This will go a long way to establish unitary control and maintain effective regulation in practice by avoiding multiplicity of control or duality of regulation in a given case. Needless to point out that by so doing India will be falling in line with the principles and practice of regulation and control adopted in other countries by the sister institutions in their respective spheres of activities and business.

Recently a scheme of 'model by laws'¹⁰ has been suggested by one writer both as an alternative and a solution to the problem of unitary control. Under this scheme, any number of organisations may be formed and run provided that they all follow the bye-laws laid down as model by the State. The disadvantages of this proposal are so obvious that it is hardly necessary to enlarge upon them. In fact, if more than one body is given the power to regulate the trade of a given city or place and to exercise control over it, it would not only create conflicting interests but also cause some confusion. The proposal if translated into practice would create such conditions as to have the effect of defeating the very object which the trade seeks to promote. The control which is intended to be introduced can be compared with that of a local self-government or Municipal Corporation in a particular town.¹¹ One cannot have two bodies in any one town trying to run its administration. In a Corporation there may be rival parties, but they are not allowed to function simultaneously. Again, the scheme of model bye-laws is not free from limitations. It is unworkable in the sense that the administration of different associations will differ. There will be different rates. Speculation, perhaps, nothing short of gambling will be the only result. It will adversely affect the cotton price.

Further, is it not better in order that the cotton interests may know where they stand to have a single regulating body in one city rather than have a number of bodies? There can be no such thing as healthy competition between two or more rival bodies, controlling one and the same trade in one and the same city or in one place. Moreover, control by more than one association means the negation of regulation in practice. Having a number of bodies in one place all following the model bye-laws it would be impracticable to have unitary control. If there is to be unitary control and if it is to be effectively carried out it must be vested in a single body for a given area. That body should have ample authority to deal with situations that may arise from time to time and to enforce its decisions thereon. This body should therefore be a well-organised institution like the E.I.C.A. in Bombay repre-

¹⁰ Dantwala M. L.: *Marketing of Raw Cotton in India*, 1937, p.257.

¹¹ "Our idea of unitary control is that there should be one body in one town to control and regulate dealings in cotton." — Personal Interviews.

representative of all sections and interests of the cotton trade for the city of Bombay. It may therefore be hoped that the sooner this problem is put an end to by giving effective unitary control to the respectively well-organised bodies for different cities or places or regions the better for all concerned with the cotton trade and markets in this Province.

Constitution of the Board of a Recognised Association: Involved in the question of unitary control is the issue of the panel system or the constitution of the governing body of the exchange. This is another vexed problem with which the trade is confronted for the last so many years. The question of the constitution of a controlling body dates back to the Act of 1919 under which the Cotton Contracts Board functioned. This Board was composed of a chairman and 11 members. The chairman and 6 of the members were to be appointed by the Government. Of the 5 other members, 3 were to be elected by the members of the Clearing House and 2 by the Millowners' Association.¹² It will be noticed that the origin of the system of panels thus lies in the constitution of the Cotton Contracts Board and the idea of sections or panels crept in the trade with the passing of the Act of 1919.

With the repeal of the Act the life of the said Board came to an end but its precedent remained and had its repercussions on the newly formed association. The principle of representation to the Board accepted at that time was that representation of interests is of more importance than that of individuals. Each section of the trade composed as a body had some misgivings about the other. This made them discard the principle of democratic representation in favour of sectional and narrow interests. There was the apprehension that if the individual representation was provided for, the institution would become an association of brokers who were then as now in a majority. The trade in turn resorted to the panel system, as a temporary measure giving each section a special representation on the Board of Directors. At first sight the system might strike to an outsider as curious, but the institution of panels was the only measure which enabled the E.I.C.A. to come into life as a representative body of all sections and interests of the trade. Had the panel system not been devised, there would have been no unity and no agreement among the various interests in Bombay. By this system different sections got representation on the main body consonant with what they considered to be their interest and stake in the cotton trade of Bombay.

In 1930, most of the members of the Wiles Committee showed their willingness to abolish the panel system in favour of election by the general body. They expressed that the system was not conducive to the betterment of the trade in general, since, it made the trade think in terms of compartments. Some of the members,

¹² Act of 1919, Section 3(i), (ii), and (iii).

however, were not ready to part with their sectional views. They apprehended that their interests were not safe in the hands of the general body, and for that reason alone they demanded that the then existing system should be allowed to remain. Hence, on this as well as on the question of election of the Board of Directors, the Committee was divided. The majority suggested the election to be by the general body but the minority demanded that each section be elected by the members of the respective panels.¹¹ This recommendation along with others was embodied in the Act of 1932 and the panel system continued to function. The question of the constitution of a recognised association has thus been a burning issue to the trade. Because the system of panels divides the whole trade into unnatural and self-centered groups, it does and has done more harm than good to the trade in general. Hence, the issue is that can reasonable representation of all interests on the Board of Directors be insured without dividing up the trade? This is the crux of the whole problem.

The main drawback of the system lies in its unrepresentative character. Panels do not either truly or adequately represent on the Board the various classes in accordance with their relative importance. For instance, the buyers' panel and the sellers' panel return 4 representatives each to the Board though their numbers of membership are hardly 55 and 106 respectively. There are 200 brokers and still they are allotted only six seats on the Board. Now whichever way one looks at it, it over-balances the other. To artificially balance the Board, one will have to define strictly who will go on the brokers' panel, who on the sellers' and who on the buyers'? At present the situation has developed to such an extent that any one member does business in all the three panels and it is difficult to say that he is only a buyer, a seller or a broker, because, he combines all three functions.¹² In fact, the dividing line between the various groups is very thin and at times misleading which renders the panel system not only futile but also dangerous in its working.¹³

Again, apprehensions as to the neglect of interests of a particular section by the general body are based on the comparative ignorance of the real interests of the general body of members. It is argued that those who handle ready cotton have a greater stake in the trade than those who deal in futures and hence, to safeguard the interests of the people dealing in spot it is necessary that panels

¹¹ Report of the Wiles Committee, p.18, 1930.

¹² "The system had its utility no doubt. Now it is not needed since the trade has developed to such an extent that no one remains within the allotted panel but does the work of all panels. For instance, we are buyers, sellers, brokers, muckdums, and what not? There are so many members falling in our category. Therefore, we say that the system has outlived its utility and we should adopt the democratic principle of representation to the Board." Reply to questionnaire.

¹³ Cf. "The Committee is of the opinion that the election should be by the general body as a whole and not by panel thereof." Report of the Cabinet Committee of Bombay; p.3; April 1947.

should be allowed to continue. Against this, it may be pointed out that the interests of spot dealers are confined to the production of the crop and its availability in Bombay only, while those of the dealers in futures extend over a vast field since business in futures comes not only from all corners of India but also from every part of the globe. It is therefore natural to emphasise here that the stake of those who deal in futures is at least equal, if not greater, to that of spot dealers. For this reason, it is but fair to allow the trade to form the controlling authority by fully trusting the good sense of the general body.

Another argument that is suggested is that the retention of panels has some deep concern with the powers of the Board. It is true that the Board has vast and almost unlimited powers in matters of bye-laws and committees. This trouble can be amicably solved by resolving that all the standing committees including the committee on bye-laws and discipline should not be nominated by the Board but be elected by the general body as is the practice in other similar associations abroad. If important decisions are arrived at by these committees who will be independent of the Board by virtue of their being elected by and made responsible to the general body, there would remain no reason for demanding any more special representation by way of panels. This will make the whole situation democratic and thoroughly representative of the premier trade of Bombay worthy of its name. The time has now arrived for broadening and democratising the constitution of the Board and for bold as well as decisive measures to be taken for this purpose as soon as possible. The directorate of the controlling body should be elected by and be responsible to the general body of members and the panel system should be abolished. Such controlling body will and must look after the interests of the trade in general. It will then be a more homogeneous whole than it is now.

5. CONCLUSION.

In view of these considerations, the conclusion seems inevitable that there should be an effective unitary control by a single body for a given city officially recognised by Statute, as in other countries, making all contracts contravening the bye-laws of such a body not only void and illegal but also punishable with a fine as well as imprisonment and that a new post of a Commissioner of organised markets be created under the Act for the purpose of effective control and better regulation of the cotton trade in the Province of Bombay. Further, the constitution of such a body must be democratised on the acknowledged democratic principle of representation, viz., one man, one vote. The general body should also be given more powers by way of taking away the powers of nomination of the standing committees by the Board and accepting the principle of election of all such committees by the general body to whom the Board and these committees should remain responsible.

CHAPTER XV.

SUMMARY AND CONCLUSIONS

WE are now in a position to put together the results of this study. It will be noticed from the preceding pages that a futures market performs several important functions rendering genuine economic services most vital to the marketing of raw cotton. Cotton exchanges are of great use to the trade for the orderly distribution of the staple, from the field to the factory. A futures market is a clearing house of all information. In seeking new sources of information and in registering promptly the news which comes to the market, the exchange goes further than mere acting as a clearing house of information for the trade. It acts as the record office too. The very fact that the futures markets are operating for 75 years and that new exchanges have come and are coming into existence does of itself signify that they have a useful and beneficial place in our economic life.

1. PLACE OF A FUTURES MARKET IN THE COTTON TRADE AND INDUSTRY

The central feature in the economic organisation of modern society is the market. From an individual point of view the production and distribution of commodities are carried on for the purpose of exchange. The tests of perfection of an organisation of trade are the promptness with which such transfer is effected and the accuracy with which it is carried out. In fact the entire trade of the world centres around the futures market. In a futures market a composite judgment of all the traders is recorded throughout the trading sessions. Hence, such a market can be said to reflect the consensus of trade opinion. Considering the fact that hundreds of thousands of people are engaged in the task of handling the world's raw cotton from the original producer through complex channels to the ultimate consumer, the futures markets of the world have reached a remarkable stage of organisation. The increased use of cotton futures markets in India as well as in foreign countries bears testimony to the vitally important place held by them.

A Futures Market is an Auxiliary Institution: Though one of the highest forms of mechanical and technical efficiency is found in a commodity futures market, it is not used as a means of merchandising the goods itself. In the first part of this work, we have seen that only a fraction of the total amount of cotton dealt with on the futures market results in actual delivery. This fact shows that a futures market is not meant to be used as a channel of actually merchandising the commodity. It is availed of rather

as an aid to the successful distribution of it. For the actual marketing of cotton, one has to look elsewhere. Because there are so many different classes of cotton with specific uses, a futures market is ordinarily an unsatisfactory place in which to buy or sell the actual staple. Those who deal in spot cotton avail of the price recording facilities of a futures market at all stages of marketing and manufacturing of cotton, without making or taking a delivery against their sales or purchases of futures contracts. In fact, commodities were produced, transported, sold and consumed hundreds of years before the first futures market was organised. It was not developed as a channel of distribution through which a farmer disposed of his product and a manufacturer procured his requirements. It can therefore be stated that a futures market developed rather as an auxiliary institution connected with speculation in prices, the financing of the trade and the counterbalancing of the business risks. Its economic functions also lead us to the same conclusion, since, almost all the vital services rendered by it are those of an auxiliary character to the distributive system. While it is not a direct link in distribution, it offers so many genuine services to a dealer of the physical commodity that it has become almost indispensable in the orderly marketing of the world's leading staple of commerce.

The Importance of the Futures Market: If a futures market is done away with, it would tell heavily upon agriculture and manufacture alike, since its insurance service will not be available. A good price-barometer indicating changing prices provided by a futures market will also be lost. By the disappearance of the price protection, those engaged in the marketing process will be forced to operate on wider margins; paying less to the producers and charging more to the consumers. Thus, in reality, the dealers would hedge their marketing operations and producers as well as consumers would be made to pay the toll. The information received by us on this point shows that the effect of a lack of futures markets (a) on agriculture, will be lower return, (b) on trade, general restrictions, (c) on commerce, decreased activity, and (d) on industry, lessened demand for industrial products. In this way, the importance of a futures market is vital to the trade and industry as a result of which it is used more and more now-a-days. In fact, the more a futures market is extended to reach the two extremes of the chain, the better for everybody.

Effects of closing the futures markets: To clearly bring home the necessity and importance of the futures market, we may refer to the situation created by the closing of the market in certain centres. At the outbreak of the World War of 1914 and during the war of 1939 the cotton exchanges in Bombay, Liverpool and New York were closed for several months.

(a) **Experience of Liverpool and New York:** The prevalence of extreme market fluctuations at the outbreak of the first world

war and the failure of firms dealing in futures made it necessary to close the markets both at Liverpool and New York. When the markets were closed, the cotton trading was largely at a standstill. There was no definite world market. Prices differed in different towns. The variations depended on the sales in night. Chaotic conditions in the trade were the immediate results. Merchants could not safely buy cotton, because they could not hedge. The same was true of other interests. In Liverpool, the authorities were urged by the British Board of Trade to make possible the resumption of futures operations. Similarly, in New York, the Board of Directors received continual appeals from spinners, farmers and merchants to reopen the market. Continued pressure was brought to bear on the respective authorities and Governments by various interests, emphasising the difficulty of carrying on business in security or confidence without the functioning of futures markets. Thus, it was not long after the exchanges were closed in Liverpool and New York that there were demands for reopening the same.¹

(b) **Indian Experience:** In order to elicit Indian opinion on the question, we asked for the same from several well-known firms with reference to the closing of the exchange in India during the World War II from the middle of May 1943 to the end of October 1943. We give below the consensus of opinions received to different aspects of the question that we could gather:

- (i) Traders could not form any idea of the future price of cotton
- (ii) The cotton trade was thrown in darkness
- (iii) Farmers received lower prices though the consumers were charged higher prices
- (iv) Margin between the cost of raw cotton and the sale price of finished article became greater
- (v) Trade activities were decreased
- (vi) Prices varied to any extremes
- (vii) Cotton trade as a whole suffered much, both in respect of accommodation and values
- (viii) The factory-owners and agriculturists had no hedge to limit their risks. Same was the case for spinners and merchants.
- (ix) The exporters could not sell forward delivery cotton.

A glance at these opinions will indicate how important and indispensable a futures market is in the economic life of modern

¹ The American Exchange went off business during the 'Bull Holidays' March 1933 for a period of 11 days. It is needless to add that the closing of the exchange had a paralysing effect on the American cotton trade.

society. It is a legitimate institution necessary for the successful handling of cotton business. Facilities are afforded to every section of the trade by the existence of a futures market. Operations on such markets are of direct interest not only to their members and millions of farmers as well as spinners but also indirectly to the public at large.

2. ECONOMIC SERVICES OF A FUTURES MARKET TO THE COTTON TRADE AND INDUSTRY

Cotton Exchange in India: In India, the growth of cotton exchanges as economic institutions for the distribution of cotton was as natural as the growth of any other economic institution. It is of interest to note that the spot business in cotton came first, then 'to arrive' contracts and out of these two developed the modern system of futures markets where futures trading is carried on, on an extensive scale. Trading in cotton futures has been conducted now for several decades. It should, however, be pointed out that the East India Cotton Association, the Karachi Cotton Association and other Indian futures markets are of recent origin; they were set up after the post-war commercial boom of 1920-22.

We have seen that the E.I.C.A. and the K.C.A. maintain:

- (i) Different systems of hedge contracts for different varieties of Indian cotton.
- (ii) A reasonable size of the unit of the contract, namely, 50 bales.
- (iii) A modern clearing association for periodical settlements and delivery of cotton; and
- (iv) A spot market.

Besides, they gather from every part of the world news bearing upon the existing supplies, visible and invisible, production and its prospects, carry-over, local and world prices in futures markets and similar materials of value required by members and the trade at large. This information is placed before the buyers and sellers to keep them in touch with every price influencing factor known so that the operators and the investing public may intelligently determine their procedure in their best interests.

Hedging and Hedge Contracts: The principal service of the cotton futures market is to afford hedging facilities. In order to protect against losses occurring under unforeseen circumstances in a business, there is a tendency among businessmen to insure against everything. The trade in cotton is not an exception to the policy adopted for the main reason that the position of an uninsured trader in the market remains precarious due to wide fluctuations in prices. By the use of a futures contract, a limit is placed on the possibility of loss and the protection thus obtained is in the nature of price insurance. To serve the purpose of hedging, a

futures market must be broad. A broad market makes possible the putting on or taking off, of hedges for large amounts with the minimum price disturbance. This characteristic is largely the result of giving the professional risk-takers and the public a convenient means of trading in futures on an organised market. Besides the requirements of breadth, hedging needs continuity in a futures market. The importance of a continuous futures market can be better appreciated when it is realised that it affords the dealer a market ever ready to absorb as large a stock of cotton as he desires to unload. Similarly, a dealer whose spot cotton may not have been sold for a moment gets an opportunity of selling it through futures which gives him an outlet for delivery. Thus, the fact that the market is continuous is itself an insurance against the risks of unsold cotton. However, it may be noted that the continuity in a market is disturbed when it responds to manipulation which makes the situation abnormal. Under normal circumstances, a futures market is so broad and continuous that any large order registers no appreciable effect on prices which are quoted from minute to minute. It is this character of continuous price quotations that is more important to a hedger, because, price quotations of the futures regularly form the basis of bidding in the spots. Because a ready market for the whole marketing season is always at the command of the buyer and the seller, cotton is also established as desirable collateral for bankers.

For the purpose of hedging against Indian cotton and cloth, the markets of the E.I.C.A. and the K.C.A. are well-equipped and better suited. So far as the extent of hedging is concerned, our conclusion is that a cotton futures market in India is used for hedging as a regular practice by merchants, dealers, and though indirectly to a considerable extent by manufacturers. But the average Indian grower or factory-owner makes very little use of hedging.

While hedging supplies an effective means of insurance against fluctuations in prices, it should be admitted that it does not give complete protection to a hedger. The protection furnished by hedging is imperfect because there is no cover against changes in 'basis'. Apart from facing the situation arising out of the variations in basis which cannot be hedged, the hedger in India has to countenance the additional risk. This additional burden is the direct outcome of the faulty construction or 'technique' of the present system of hedge contracts in the Bombay market. Hence, a rational reconstruction of the hedge contracts with a thorough overhauling of the existing system is long overdue. Though the matter is receiving some consideration at the hands of the E.I.C.A. a formula agreeable to all the sections of the trade is yet to be evolved. Our suggestion in this direction is that the system of hedge contracts in India should be based neither on one hedge contract for all the principal growths of Indian cotton, nor on a large number of hedge contracts for different styles. Our conclusion

is that there should be only two contracts for our market and they should cover all the main varieties of Indian cotton. Of these two contracts, one should be for staple varieties and the other for non-staple growths. Further, regarding the standards for grade and staple, our opinion is that we should adopt the system of 'universal standards' for Indian cotton and in order to make the applicability of this system compulsory for all markets dealing in Indian cotton, the Indian Cotton Standards Act should be passed at an early date.

Cotton Prices: The main object of the marketing system is to ascertain the proper price of every commodity which passes through it. As a corollary to this it also aims at securing uniform prices for a particular commodity throughout the world. It is the futures market that renders possible the conception of a world market. The futures prices ruling during the trading hours are readily ascertainable, because, at any time they can be quoted on the market. They are given free publicity in the world's press. It is on the published market quotations that all interested in the trade rely in every day business affairs. The price paid to the growers generally depends on the price of futures. Besides, the price determined on a futures market serves the following purposes; (a) it indicates the market value of cotton, (b) it is used as the settlement price for futures contracts; and (c) it acts as a guide to upcountry agents in their transactions. Since, each day thousands of bids based on the futures quotations are received by producers and country dealers, and thousands of offers based on such prices are sent to mills and distributors, the price-registering function of a futures market is of considerable importance. Without this service the interests of producers and consumers would suffer most because they would not know the price of cotton from hour to hour and day to day. Every information affecting present or future prices registers its influence immediately in a futures market. It may be weather conditions in the Broach District or in the American cotton Belt, business conditions in India or England, labour troubles in Ahmedabad or Lancashire and the outbreak of war between Poland and Germany, all these news are instantly recorded and their effects registered in futures prices. A futures market as compared to a spot market is highly sensitive, keenly competitive, and more responsive to every change in market opinion. Hence, the price quoted at any moment, represents a balanced judgment of those buying and selling in a futures market.

It is through a futures market that the dealers are enabled to exercise their best judgment to discount the future at once in the form of actual transactions. For instance, the effect of a short or a bumper crop upon prices is discounted long before it would otherwise be realised by the general public. The daily discounting of current events thus tends to subsidise the sudden decline or rise in prices which otherwise would have occurred upon wide publication of slowly developing events. The existence of such a market

where cotton is sold at a price which will not be ordinarily dislocated by any amount of sale or purchase, is of great service to the various interests, such as, agriculturists, manufacturers, investors, etc., who wish to anticipate the future trends of prices for their individual interests. While describing a futures market as a price-registering organisation, it is not an exaggeration to say that the price registration is the most vital service upon which hedging and financing of the trade depend.

Facilities afforded for hedging to all those who need protection is not the only point in favour of the E.I.C.A. or the K.C.A. but the price-level established there has a far-reaching significance both in India and abroad. Therefore, if prices can be successfully forecasted in advance, our exchanges will tend to render the economic service of the highest order to the cotton trade and industry. Having examined the difficulties that a successful forecaster has to overcome in general and for Indian cotton in particular, we have come to the conclusion that the price of cotton futures cannot be forecasted for minor fluctuations and for a duration of time involving several months. All that can be achieved is that the trend can be foretold for the period immediately ahead. The reason for this lies in the fact that over and above the difficulties involved in arriving at the world's total supply and demand for a given season, general economic and political developments influence cotton prices so often, that it is impossible to isolate both their relative importance and respective influences. Moreover, the minor variations are the products not of one but of a variety of causes. These causes can never be visualised in their proper perspective in advance. Though the short-term factor or factors causing minor variations are not the fundamental forces determining the price in the long run, they are certainly the factors deciding precise points for the purchase or sale of a futures contract for a given day, week or month. For this reason, they are of greater concern to a dealer on a futures market than any other single group of factors calculated to affect the price of cotton. Even among the short-term forces, by far the most important factor influencing the price is the market news. Interpretation of news by traders on a futures market assures a degree of anticipation of future events that would not otherwise be possible. Hence, if the present standard of information that is circulated to the trade and made available to the public is materially improved, better results can certainly be obtained. In the end it may however be observed that prices during the war are governed more by political and other factors than by pure economic considerations or the demand and supply situation in a given market like the E.I.C.A. at a given time and that they are to be controlled and kept within certain limits by creating artificial 'floors' and 'ceilings' for a given season.

Badla Business: The futures price quoted on a particular market represents the general price-level of the growth or growths dealt

in that market. It is this element of general price-level that can be compared with those ruling on the different futures markets of the world. This is rendered possible only by a net work of communication services connected with the futures markets all over the world. It is in these markets that all the buyers and sellers of the world meet throughout the working hours of a trading day and exchange their views regarding prices. As a result, allowing for the cost of transport, etc., plus the difference in quality, cotton prices in different markets are rendered uniform. This makes it possible to link together the different markets of the cotton world. When such uniformity in a particular market is disturbed, the operators generally known as 'straddlers' try to bring about the necessary adjustments by operating in other markets. Straddlers enter the badla business between the different markets of the world and assume that so far as it can be accomplished by human foresight the coming events will be reflected on the present price-level before their actual appearance. Should the price in one market, considering cost differentials and quality be out of line with the price prevailing in another a straddler will buy in the low and simultaneously sell an equal amount in the high market. The product is thus caused to flow from a place where for the moment it fetches low price to the place commanding a high price. A straddler by constant watch keeps all the leading markets 'into line' with one another. This is an important though most technical service rendered to the cotton trade by a futures market to our modern industrial society.

Teji-Mandi Transactions: Although a transaction in Teji-mandi is not officially recognised in India but hitherto, it forms a popular medium of dealing in cotton. No doubt, from the stand-point of a buyer the teji-mandi transaction is both commercially healthy and economically sound. Hence, the business on leading exchanges in India assumes such a volume that it affects the trend of cotton prices, especially in Bombay. In what direction the price fluctuations will be accentuated depends upon the position of a seller of teji-mandi contracts. There can be little doubt as to the fact that the position of the seller of options, as we have explained above, tends to influence a price level in a given market. If a large amount of teji-mandi transactions happens to accumulate on any one position of any one contract, the natural sequence is that a seller of options has to buy in a rising market and sell in a falling market. In other words, the operations of a seller of options help both the bullish and the bearish trends of prices. We would therefore suggest that the transactions in teji-mandi should be officially brought under control and a limit be prescribed on a seller's trading in options. For this purpose, a formal recognition of teji-mandi transaction is absolutely necessary. But such a recognition must be qualified by a proviso that in order to restrict a seller's dealings, rules should be framed imposing the maximum limit of amount and quantity beyond which he cannot sell options on a

particular position of a particular contract.

Speculation: Recognising the value of hedging and continuous price quotations on a futures market, the speculative transactions must be regarded not only as inevitable but also as desirable operations. Similarly, the existence of continuous price quotations presupposes the existence of a speculative market. If it were not for the futures market and the existence of professional dealers, the vast quantity of cotton lying in godowns amounting to crores of rupees would not be available for business purposes except in a very crude manner. By the existence of a speculative market, a commodity is rendered less expensive, because, the margin of profit is cut very fine. The fact of an open market with quotations freely distributed, keeps both the producer and consumer in close contact with the price-level resulting in the narrowest of the handling charges. Traders are enabled to do more business with less capital, for, bankers are willing to enlarge greatly the volume of credit on commodities dealt on a futures market. In any field of business activity, the element of risk is generally represented in price. The greater the risk of the dealer, the wider his margin of profit must be. A dealer who can rid himself of the risk incidental to price hazards can afford to do business on a small margin of profit.² In the absence of a futures market spot transactions would need to be made at somewhat wider margins. It is only due to the existence of a speculative market that prompt and ample finance are forthcoming and the marketing is rendered cheap as well as easier. But for the quality of liquidity, the banks or financiers would be reluctant to finance the movements of the crop. The element of liquidity provides a banker with an ever-ready market in futures and gives him confidence that he will be able to sell cotton at a moment's notice and get his money back should the necessity arise. The liquidity of futures rests essentially on the fact that personal risk is largely eliminated. Each member deals with all others indiscriminately, because, the obligations of the futures are made transferable.

The general characteristics of a futures contract, though highly technical in nature, render its form so clear and simple that it requires no immediate attention of the trader to greater details.³ Its upshot is that transactions in futures are indiscriminately carried out both by professionals and the public. Consequently, speculation sometimes degenerates into gambling. Again, it cannot be denied that under certain circumstances, the price may be manipulated or dictated by some operators at the cost of others. While these circumstances may be natural or artificial and the shrewd dealers may be taking due or undue advantage of the situation the fact remains that our market, at times, is considerably influenced by

² Evidence recorded to our inquiry points to the effect that an average net profit to the Middleman, after deducting overhead charges and interest on capital comes to about one per cent.

their activities. The manipulative action of a speculator tends to injure the interests of producers or consumers and sometimes of both. The modern system of trading in futures, therefore, proves itself a convenient scapegoat in India, particularly in Bombay, for all the evils of the trade. Abuses of the speculative system disrupt the machinery of legitimate speculation in futures on an organised commodity market. They not only constitute a menace to a futures market but also cause grave injustice to an economic institution like the E.I.C.A. or the K.C.A. Hence, some drastic measures must be taken before the evils of speculation gather momentum to interfere with its benefits.

Our suggestion to suppress the inordinate speculation that is going on in Indian markets are:

1. The shortening of the period of clearings, i.e. to maintain a daily settlement on the leading exchanges.
2. The introduction of a system of maintaining a minimum amount of deposit with the clearing house; and
3. The adoption of the compulsory margin system for clients in proportion to the magnitude of the business put in.
4. A trading limit should be prescribed for individuals.
5. A limit on daily fluctuations up or down in the price-level should also be prescribed.

We believe that sooner these suggestions are put into effect, the better for the trade in general.

Control of futures trading and market: An organised market provides and enforces rules for the conduct of business. It also establishes bye-laws for the settlement of disputes. Such a market is characterised by a comprehensive system of rigid rules especially when compared with a spot market. In a business where producers and ultimate buyers are so widely scattered, it is easy to appreciate how a lack of rigid and systematic control over the morale and practices of various individuals constituting the market would lead to chaos and misunderstanding. Those dealing in futures need a definite basis of understanding expressed in established rules, because, the futures contract does not relate to any specific cotton but is a basis contract. The multiplicity of rules of an exchange is largely to be explained by the aim, on the one hand, to make the contract perfectly general in all its aspects, and on the other, to make it enforceable at law. In addition, a futures market provides for the controversy that may arise from the qualities and from matters connected with accounts, between persons engaged in the trade. A machinery known as adjustment by arbitration is prescribed. It tends not only to foster high standards of business morality and trade usage but also to minimise litigation. It further simplifies and even expedites the process of marketing.

One of the main objects of a futures market is to establish just and equitable principles and to control, promote as well as regulate the trade in any particular country. For this purpose, it regulates trading and provides for its conduct in an orderly manner. It is through an organised market that various improvements are effected in the trade practice and customs. It is instrumental in bringing about uniformity in rules and etiquette. An exchange also exercises control over speculation when it becomes inordinate and wild. In this connection, it will not be an exaggeration to say that there is no greater commercial problem in India than the problem of regulation and control of futures trading and futures markets in cotton. Our analysis of this problem, however, points to the conclusion that if the authorities make up their mind and pursue the question earnestly the problem is not so difficult as it appears at first sight. If the Government once for all decides to practice an 'effective' unitary control, the problem is capable of being easily solved.

Our submission in this matter is that in order to remove the troubles of the cotton trade, the unity of control should be made effective under the auspices of a single body for a given city or place officially recognised by statute making all contracts contravening its bye-laws not only void but also illegal and punishable at law. Further, in order to put an end to the panel system which has outlived its utility, the Board of Directors of a statutorily recognised institution should be elected by and be responsible to, the general body of members. This would tend to do away with the division of trade into buyers, sellers or brokers. It would then certainly create a wider outlook and better atmosphere for the cotton trade of our country. Finally, a new post of a commissioner of organised markets must be created under the Act for the purpose of effective control and better regulation of the futures trading in Indian cotton.

3. FUTURE OUTLOOK FOR A COTTON EXCHANGE IN INDIA

However important an economic organisation like a commodities futures market may be, its shortcomings should never be lost sight of for the reason that after all, it is also a human institution and as such, is subject to man-made factors. Granting for a moment that the control in India is made effectively unitary, the problem of regulation of futures trading and markets will not be completely solved, because, even if the effective unitary control is vested in a single democratically constituted body like the E.I.C.A. for Bombay it is possible that some of its own members may frustrate the very purpose of the legislation. Excessive and inordinate speculation could be carried on even in a single body. At times such activities make the market unhealthy by becoming the cause of violent price fluctuations and by rendering the futures contract of little use both as a medium of hedging and as an indicator of

the price-level. Hence, these undesirable activities should be controlled by legislation. Such activities can be brought under control by enforcing margins, limiting hours of business, and restricting certain other matters, such as, price fluctuations for a given day, limiting the trading position of an individual, etc. This has been accomplished by most of the foreign leading markets and the authorities have taken steps to improve the character of trading. In view of this, we suggest that in India the authorities of a single statutorily recognised body should be asked to consider the advisability of adopting the following measures:

1. The limitation of the daily price fluctuations.
2. The limitation on the trading of individuals to the extent of net long or short position of 50,000/60,000 bales from the last clearing. This should not apply to hedge sales and purchases.
3. The publication of such figures as to enlighten the public at large in matters of volume of transactions, deposits maintained by the parties with the clearing house and other useful as well as relevant information at least once a week.
4. Adoption of a system of daily settlement and clearing.
5. Issuing a licence to all members of a recognised association subject to certain fees and conditions to be revised every year.
6. Appointing a commissioner of organised markets for a given province or State.

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(The letter 'n' after the figure denotes a footnote)

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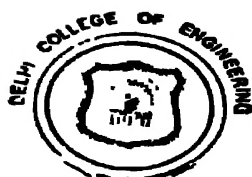
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